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GENERAL CATALOG:

College of Arts and Sciences

Graduate School of Arts and
Sciences

The Florence Heller Graduate
School for Advanced Studies
in Social Welfare

Robin Brooks

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BRANDEIS UNIVERSITY


GRADUATE SCHOOL OF ARTS AND SCIENCES



1960-1961



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GRADUATE SCHOOL OF ARTS AND SCIENCES

Academic Calendar

1960-1961

FALL SEMESTER

September 14, <i>Wednesday</i> and September 15, <i>Thursday</i>	Registration, including payment of fees, 9:30 to 11:30 a.m. and 1:30 to 4:15 p.m. in Rabb Graduate Center. There will be a \$10.00 fee for late registration.
September 16, <i>Friday</i>	Classes begin.
September 22, <i>Thursday</i>	No classes.
September 23, <i>Friday</i>	No classes.
September 30, <i>Friday</i>	Final date for registration.
October 6, <i>Thursday</i>	No classes.
October 7, <i>Friday</i>	Final date for changing program without fee of \$10.00
October 13, <i>Thursday</i>	No classes.
October 14, <i>Friday</i>	Final date for adding any courses for credit.
November 11, <i>Friday</i>	No classes.
November 24, <i>Thursday</i>	No classes.
November 25, <i>Friday</i>	No classes.
December 16, <i>Friday</i>	Winter recess begins after last class.
January 3, <i>Tuesday</i>	Classes resume.
January 9, <i>Monday</i> through January 13, <i>Friday</i>	Registration for Spring Semester for all students in residence. Resident students will be charged a \$10.00 fee for late registration.
January 16, <i>Monday</i>	No classes.
January 17, <i>Tuesday</i> through January 27, <i>Friday</i>	Mid-year examinations.
January 30, <i>Monday</i> and January 31, <i>Tuesday</i>	Registration for students entering for the Spring Semester. New students who register at a later date will be charged a \$10.00 fee.
January 30, <i>Monday</i>	Final date for reporting grades for students who received "Inc." in the previous semester.
January 31, <i>Tuesday</i>	Final date for admission to candidacy for the Ph.D. and for completion of residence and language requirements for all students expecting to have the Ph.D. conferred in June, 1961.

SPRING SEMESTER

February 1, <i>Wednesday</i>	Classes resume.
February 15, <i>Wednesday</i>	Final date for registration of new students. Final date for change of study program without fee of \$10.00.
February 22, <i>Wednesday</i>	No classes.
February 23, <i>Thursday</i>	Final date for adding any course for credit.
March 1, <i>Wednesday</i>	Final date for filing applications for fellowships and scholarships for 1961-62.
March 29, <i>Wednesday</i>	Spring recess begins after last class.
April 1, <i>Saturday</i>	Final date for submission of Ph.D. dissertations.
	Final date for all students applying for graduate degrees for June, 1961.
April 10, <i>Monday</i>	Classes resume.
April 14, <i>Friday</i>	Final date for M.A. and M.F.A. candidates to complete language requirements.
May 1, <i>Monday</i>	Final date for submitting Master's theses.
May 15, <i>Monday</i>	Final date for certification by the Faculty that June Ph.D. candidates have satisfactorily completed and defended dissertations.
May 22, <i>Monday</i>	Final date for deposit of Ph.D. dissertations with Librarian.
May 23, <i>Tuesday</i> through June 2, <i>Friday</i>	Final examinations.
May 26, <i>Friday</i>	Final date for reporting grades for students who received "Inc." in the previous semester.
May 30, <i>Tuesday</i>	No examinations.
June 1, <i>Thursday</i>	Final date for June degree candidates to pay the Diploma Fee and to discharge all financial indebtedness to the University.
June 2, <i>Friday</i>	Grades due for candidates for degrees.
June 9, <i>Friday</i>	Grades due for all Spring Semester and full-year courses.
June 10, <i>Saturday</i>	Baccalaureate.
June 11, <i>Sunday</i>	Commencement.

Officers of Instruction

ABRAM LEON SACHAR, PH.D., LITT.D.	<i>President of the University</i>
LAWRENCE H. FUCHS, B.A., PH.D.	<i>Dean of Faculty and Associate Professor of Politics</i>
LEONARD W. LEVY, A.M., PH.D.	<i>Dean of the Graduate School, Associate Dean of Faculty and Earl Warren Professor of Legal and Constitutional History</i>
LOUIS LEVIN, PH.D.	<i>Dean of Science and Associate Dean of Faculty</i>
ALEXANDER ALTMANN, M.A., PH.D.	<i>Philip W. Lown Professor of Jewish Philosophy</i>
ALFRED ALVAREZ, B.A., M.A.	<i>Visiting Professor of English</i>
VALENTINE BARGMANN, PH.D.	<i>Jacob Ziskind Visiting Professor of Physics (Princeton University)</i>
*ARTHUR BERGER, B.A., M.A.	<i>Professor of Music</i>
DAVID SANDLER BERKOWITZ, A.M., PH.D.	<i>Professor of History</i>
SAUL G. COHEN, M.A., PH.D.	<i>Rita H. Aronstam Professor of Chemistry</i>
ELIZABETH F. COLSON, M.A., PH.D.	<i>Samuel Rubin Professor of Anthropology</i>
**LEWIS A. COSER, PH.D.	<i>Harry Coplan Professor of Sociology</i>
JAMES V. CUNNINGHAM, A.B., PH.D.	<i>Professor of English</i>
OSBORNE EARLE, A.M., PH.D.	<i>Peter and Elizabeth Wolkenstein Professor of English</i>
IRVIN EHRENPREIS, M.A., PH.D.	<i>Visiting Professor of English (University of Indiana)</i>
DAVID L. FALKOFF, B.A., PH.D.	<i>Professor of Physics (on the Buffalo Foundation)</i>
IRVING GIFFORD FINE, A.B., A.M.	<i>Walter W. Naumburg Professor of Music</i>
ORRIE M. FRIEDMAN, B.Sc., PH.D.	<i>Helena Rubinstein Professor of Chemistry</i>
NAHUM NORBERT GLATZER, PH.D.	<i>Michael Tuch Professor of Jewish History</i>
MAX GLUCKMAN, B.A., PH.D.	<i>Samuel Rubin Visiting Professor of Anthropology (University of Manchester)</i>
SIDNEY GOLDEN, B.S., PH.D.	<i>Henry F. Fischbach Professor of Chemistry</i>
ABRAHAM GOLDIN, M.A., PH.D.	<i>Visiting Professor of Biochemistry</i>
CYRUS H. GORDON, M.A., PH.D.	<i>Professor of Near Eastern Studies</i>
EUGENIA HANFMANN, PH.D.	<i>Professor of Psychology</i>
IRVING HOWE, B.S.Sc.	<i>Professor of English</i>
EDGAR NATHANIEL JOHNSON, PH.B., PH.D.	<i>Professor of History</i>
MARTIN D. KAMEN, B.S., PH.D.	<i>Rosenstiel Professor of Biochemistry</i>
NATHAN O. KAPLAN, A.B., PH.D.	<i>Rosenstiel Professor of Biochemistry</i>
*HAROLD P. KLEIN, B.A., PH.D.	<i>Abraham and Gertrude Burg Professor of Biology</i>
LOUIS KRONENBERGER, LITT.D.	<i>Professor of Theatre Arts</i>
HENRY LINSCHITZ, M.A., PH.D.	<i>Professor of Chemistry</i>
WILLIAM FARNSWORTH LOOMIS, B.S., M.D.	<i>Professor of Biochemistry</i>
FRANK EDWARD MANUEL, A.M., PH.D.	<i>Mack Kahn Professor of Modern History</i>
HERBERT MARCUSE, PH.D.	<i>Professor of Politics and Philosophy</i>
ABRAHAM H. MASLOW, M.A., PH.D.	<i>Philip Meyers Professor of Psychology</i>
LEOPOLDO NACHBIN, PH.D.	<i>Visiting Professor of Mathematics</i>
EDWIN BURR PETTET, A.B., PH.D.	<i>Professor of Theatre Arts</i>
*PHILIP RAHV	<i>Professor of English</i>
HARRY RAND, M.D.	<i>Professor of Clinical Psychiatry</i>
JOHN P. ROCHE, M.A., PH.D.	<i>Morris Hillquit Professor of Labor and Social Thought</i>

* On Leave, 1960-1961.

** On Leave, Spring Term, 1960-1961.

OFFICERS OF INSTRUCTION

*ARNOLD S. SHAPIRO, M.A., PH.D.	<i>Professor of Mathematics</i>
MAURICE SUSSMAN, B.S., PH.D.	<i>Professor of Biology</i>
KURT H. WOLFF, PH.D.	<i>Professor of Sociology</i>
EDGAR ZWILLING, M.A., PH.D.	<i>Professor of Biology</i>
MAURICE AUSLANDER, B.A., PH.D.	<i>Associate Professor of Mathematics</i>
*DAVID A. BUCHSBAUM, A.B., PH.D.	<i>Associate Professor of Mathematics</i>
MAX CHRETIEN, PH.D.	<i>Associate Professor of Physics</i>
STANLEY DESER, B.S., PH.D.	<i>Visiting Associate Professor of Physics</i>
HERMAN T. EPSTEIN, M.A., PH.D.	<i>Associate Professor of Biophysics</i>
<i>(on the Morris Schapiro and Family Foundation)</i>	
**GEORGE FISCHER, M.A., PH.D.	<i>Associate Professor of Politics</i>
KENNETH WILLIAM FORD, A.B., PH.D.	<i>Associate Professor of Physics</i>
*OSCAR GOLDMAN, A.M., PH.D.	<i>Associate Professor of Mathematics</i>
*JACK S. GOLDSTEIN, M.S., PH.D.	<i>Associate Professor of Physics</i>
MOSHE H. GOSHEN-GOTTSTEIN, M.A., PH.D.	<i>Visiting Associate Professor of Semitic Languages</i>
<i>(Hebrew University)</i>	
*EUGENE P. GROSS, A.M., PH.D.	<i>Associate Professor of Physics</i>
RICHARD M. HELD, M.A., PH.D.	<i>Associate Professor of Psychology</i>
MILTON HINDUS, B.A., M.S.	<i>Associate Professor of English</i>
WILLIAM P. JENCKS, M.D.	<i>Associate Professor of Biochemistry</i>
<i>(on the Rosenstiel Foundation)</i>	
*ALBERT KELNER, M.Sc., PH.D.	<i>Associate Professor of Biology</i>
<i>(on the Bernard Aronson Foundation)</i>	
JAMES B. KLEE, M.A., PH.D.	<i>Associate Professor of Psychology</i>
ROBERT LINCOLN KOFF, B.MUS.	<i>Adjunct Associate Professor and Director of Performing Activities in Music</i>
LAWRENCE LEVINE, M.S., SC.D.	<i>Associate Professor of Biochemistry</i>
<i>(on the Rosenstiel Foundation)</i>	
KENNETH J. LEVY, M.F.A., PH.D.	<i>Associate Professor of Music</i>
ROBERT A. MANNERS, M.A., PH.D.	<i>Associate Professor of Anthropology</i>
<i>(on the Samuel Rubin Foundation)</i>	
JOHN F. MATTHEWS, B.A.	<i>Associate Professor of Theatre Arts</i>
RICARDO B. MORANT, M.A., PH.D.	<i>Associate Professor of Psychology</i>
ROBERT OTTO PREYER, M.A., PH.D.	<i>Associate Professor of English</i>
MYRON ROSENBLUM, A.M., PH.D.	<i>Associate Professor of Chemistry</i>
SILVAN S. SCHWEBER, M.S., PH.D.	<i>Associate Professor of Physics</i>
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ROBERT STEVENSON, PH.D., D.Sc.	<i>Associate Professor of Chemistry</i>
WALTER TOMAN, PH.D.	<i>Associate Professor of Psychology</i>
CHI-HUA WANG, M.S., PH.D.	<i>Adjunct Associate Professor of Chemistry and Research Associate</i>
ELLIOT BAKER, M.A., PH.D.	<i>Adjunct Assistant Professor of Psychology</i>
*SAUL BARSHAY, M.A., PH.D.	<i>Assistant Professor of Physics</i>
EDGAR H. BROWN, JR., M.A., PH.D.	<i>Assistant Professor of Mathematics</i>
STANLEY DIAMOND, A.B., PH.D.	<i>Assistant Professor of Anthropology</i>

* On Leave, 1960-1961.

** On Leave, Spring Term, 1960-1961.

OFFICERS OF INSTRUCTION

PAUL B. DORAIN, B.S., PH.D.	<i>Assistant Professor of Chemistry</i>
RICHARD J. DRACHMAN, A.M., PH.D.	<i>Assistant Professor of Physics</i>
ROBERT EVANS, A.B., A.M.	<i>Assistant Professor of English</i>
*ROBERT A. FELDMESSER, M.A., PH.D.	<i>Assistant Professor of Sociology</i>
HENRY A. FISCHER, PH.D.	<i>Assistant Professor of Judaic Studies</i>
<i>(on the Pincus Glickman Foundation)</i>	
VERA K. FISCHER, B.A., PH.D.	<i>Assistant Professor of Physics</i>
FAWZI F. GADALLAH, PH.D.	<i>Assistant Professor of Mediterranean Studies</i>
HARVEY D. GOLDSTEIN, B.S., M.A.	<i>Assistant Professor of English</i>
LAWRENCE GROSSMAN, B.A., PH.D.	<i>Assistant Professor of Biochemistry</i>
<i>(on the Rosenstiel Foundation)</i>	
ALFRED HARRIS, M.A.	<i>Visiting Assistant Professor of Anthropology</i>
WILLIAM LIND HOYT, M.S., PH.D.	<i>Assistant Professor of Mathematics</i>
MARY ELLEN JONES, B.S., PH.D.	<i>Assistant Professor of Biochemistry</i>
<i>(American Cancer Society Scholar)</i>	
RICHARD M. JONES, A.B., PH.D.	<i>Assistant Professor of Psychology</i>
ROBERT E. KANE, B.S., PH.D.	<i>Assistant Professor of Biochemistry</i>
<i>(on the Rosenstiel Foundation)</i>	
DANIEL J. KLEITMAN, PH.D.	<i>Assistant Professor of Physics</i>
JOSEPH J. KOHN, M.A., PH.D.	<i>Assistant Professor of Mathematics</i>
RAY A. KUNZE, M.S., PH.D.	<i>Assistant Professor of Mathematics</i>
HAROLD I. LEVINE, M.S., PH.D.	<i>Assistant Professor of Mathematics</i>
JOHN M. LOWENSTEIN, B.S., PH.D.	<i>Assistant Professor of Biochemistry</i>
HEINZ M. LUBASZ, M.A., PH.D.	<i>Assistant Professor of History</i>
JULIUS MARMUR, M.S., PH.D.	<i>Assistant Professor of Biochemistry</i>
*KIRK W. MCVOY, B.A., PH.D.	<i>Assistant Professor of Physics</i>
STANLEY E. MILLS, PH.D.	<i>Assistant Professor of Biochemistry</i>
<i>(on the Howard Hughes Foundation)</i>	
RICHARD S. MORGAN, B.A., M.D.	<i>Assistant Professor of Biochemistry</i>
<i>(Established Investigator of the American Heart Association)</i>	
ULRIC NEISSER, M.A., PH.D.	<i>Assistant Professor of Psychology</i>
GJERDING OLSEN, A.M., PH.D.	<i>Assistant Professor of Biology</i>
<i>(on the Julius M. Rogoff Foundation)</i>	
JOHN M. OLSON, PH.D.	<i>Assistant Professor of Biochemistry</i>
<i>(on the Rosenstiel Foundation)</i>	
RICHARD S. PALAIS, M.A., PH.D.	<i>Assistant Professor of Mathematics</i>
DAVID F. RICKS, B.A., PH.D.	<i>Assistant Professor of Psychology</i>
RONALD M. ROCKMORE, B.S., PH.D.	<i>Assistant Professor of Physics</i>
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MIRIAM F. SCHURIN, M.S., PH.D.	<i>Assistant Professor of Biology</i>
MORRIS SOODAK, M.S., PH.D.	<i>Assistant Professor of Biology and Biochemistry</i>
PHILIP A. ST. JOHN, M.S., PH.D.	<i>Assistant Professor of Biology</i>
CALDWELL TITCOMB, M.A., PH.D.	<i>Assistant Professor of Music</i>
THOMAS R. TUTTLE, JR., M.S., PH.D.	<i>Assistant Professor of Chemistry</i>

* On Leave, 1960-1961.

** On Leave, Spring Term, 1960-1961.

OFFICERS OF INSTRUCTION

JOHN VAN DOREN, M.A., PH.D.	<i>Assistant Professor of English</i>
HELEN VAN VUNAKIS, B.A., PH.D.	<i>Assistant Professor of Biochemistry</i> (on the Rosenstiel Foundation)
DWIGHT WAYNE YOUNG, TH.M., PH.D.	<i>Assistant Professor of Semitic Languages</i>
IRVING GRAY, B.S., PH.D.	<i>Lecturer in Biochemistry</i>
BENJAMIN HALPERN, PH.D.	<i>Lecturer in Near Eastern Studies</i>
HEISUKE HIRONAKA, M.S., PH.D.	<i>Research Lecturer in Mathematics</i>
ROBERT F. HUTTON, M.A., PH.D.	<i>Lecturer in Biochemistry</i>
JEROME I. KAPLAN, B.S., PH.D.	<i>Adjunct Lecturer in Physics and Research Associate</i>
LUCILLE H. KLEE, M.A., PH.D.	<i>Lecturer in Chemistry</i>
HENRI MITLER, B.S., PH.D.	<i>Adjunct Lecturer in Physics and Research Associate</i>
FRANK PELLEG	<i>Visiting Lecturer in Music</i>
HARALD A. T. REICHE, A.M., PH.D.	<i>Lecturer in History</i>
MENASHA J. TAUSNER, B.A., PH.D.	<i>Adjunct Lecturer in Physics and Research Associate</i>
JOHN BURT WIGHT, ED.M., PH.D.	<i>Lecturer in English</i>
MARTIN BOYKAN, B.A., M.M.	<i>Instructor in Music</i>
JEROME COHEN, B.A., M.A.	<i>Instructor in History</i>
GEORGE L. COWGILL, M.S., A.M.	<i>Instructor in Anthropology</i>
CHANDLER M. FULTON, A.B.	<i>Instructor in Biology</i>
ALFRED NASH PATTERSON	<i>Director of University Chorus</i>
HUGH N. PENDLETON, III, M.S., PH.D.	<i>Instructor in Physics</i>
HOWARD STEIN, A.B., PH.D.	<i>Instructor in Mathematics</i>

THE GRADUATE COUNCIL

The members of the Graduate Council of the Graduate School of Arts and Sciences are appointed annually by the President of Brandeis University. The Graduate Council for 1960-61 is as follows:

THE PRESIDENT OF THE UNIVERSITY *and* THE DEAN OF THE FACULTY OF ARTS AND SCIENCES, *ex officio*

THE DEAN OF THE GRADUATE SCHOOL (*Council Chairman*)

MAURICE AUSLANDER, *Chairman, Department of Mathematics*

SAUL G. COHEN, *Chairman, Department of Chemistry*

ELIZABETH F. COLSON, *Chairman, Department of Anthropology*

NAHUM NORBERT GLATZER, *Chairman, Department of Near Eastern and Judaic Studies*

CYRUS H. GORDON, *Chairman, Department of Mediterranean Studies*

IRVING HOWE, *Chairman, Department of English and American Literature*

MARTIN D. KAMEN, *Chairman, Committee on Biophysics*

NATHAN O. KAPLAN, *Chairman, Department of Biochemistry*

LOUIS LEVIN, *Chairman, Science Council*

KENNETH LEVY, *Chairman, Department of Music*

HERBERT MARCUSE, *Chairman, Committee on History of Ideas*

ABRAHAM H. MASLOW, *Chairman, Department of Psychology*

CHARLES I. SCHOTTLAND, *Dean, Florence Heller Graduate School for Advanced Studies in Social Welfare*

SILVAN S. SCHWEBER, *Chairman, Department of Physics*

EDGAR ZWILLING, *Chairman, Department of Biology*

THE GRADUATE SCHOOL OF ARTS AND SCIENCES

History and Organization

The Graduate School of Arts and Sciences was formally established in 1953 when the Board of Trustees of Brandeis University authorized graduate study in the areas of Chemistry, Music, Psychology, and Near Eastern and Judaic Studies. The first Master of Arts degree was conferred in 1954, the first Master of Fine Arts degree in 1956; and the first Doctor of Philosophy degree in 1957.

The general direction of the Graduate School is vested in a Graduate Council of the Faculty composed of the President and the Dean of Faculty, *ex officio*; the Dean of the Graduate School; and one representative, usually the Chairman, of each of the several Departments and Committees of the University offering graduate instruction. The members of the Graduate Council from Departments and Committees are appointed by the President on the recommendation of the Dean of the Graduate School. The functions of the Graduate Council, exercised in consonance with University policy, are to determine requirements for admission; to provide programs of study and examinations; to establish and maintain requirements for graduate degrees; to approve candidacy for degrees; to make recommendations for degrees; to make recommendations for new graduate areas of study; to lay down such regulations as may be considered necessary or expedient for the governance of the Graduate School; and to exercise a general supervision over its affairs. The Dean of the Graduate School is the Chairman of the Graduate Council and the chief executive officer of the Graduate School.

Objectives

The underlying ideal of the Graduate School is to assemble a community of scholars, scientists and artists, in whose company the student-scholar can pursue studies and research as an apprentice. This objective is to be attained by individualizing programs of study, restricting the number of students accepted, maintaining continual contact between students and faculty, and fostering the intellectual potential of each student.

Degrees will be granted upon the evidence of intellectual growth and development, rather than solely on the basis of formal course credits. Fulfillment of the minimum requirements set forth below cannot, therefore, be regarded as the sole requisite for degrees.

Areas of Graduate Study

During the academic year 1960-1961, graduate programs will be offered in the following areas:

- | | |
|------------------------------------|-------------------------------------|
| 1. Anthropology | 7. History of Ideas |
| 2. Biochemistry | 8. Mathematics |
| 3. Biology | 9. Mediterranean Studies |
| 4. Biophysics | 10. Music |
| 5. Chemistry | 11. Near Eastern and Judaic Studies |
| 6. English and American Literature | 12. Physics |
| 13. Psychology | |

THE GRADUATE SCHOOL OF ARTS AND SCIENCES

Details of the programs and courses offered in these areas are given below. In succeeding years, the graduate program will be extended to cover other areas.

The Board of Trustees of the University has authorized a graduate program in Sociology commencing with the academic year 1961-1962.

Graduate study in social welfare is offered by the Florence Heller Graduate School for Advanced Studies in Social Welfare. For information concerning this area of study, see the catalog of that School.

Graduate School Office

The Graduate School Office is located in the Rabb Graduate Center, Rooms 107 to 111. The office is open Monday through Friday from 9 A.M. to 5 P.M. All requests for information, catalogs, and application forms should be addressed to the Dean of the Graduate School of Arts and Sciences, Brandeis University, Waltham 54, Massachusetts.

Admission

As a general rule only well qualified men and women who have completed the normal four-year program leading to the Bachelor's degree will be considered for admission to the Graduate School. Graduates of foreign schools and others who have completed the equivalent of a Bachelor's degree program may apply, describing the educational program they have completed.

TESTING

Applicants for admission to the graduate areas in Biochemistry, Biophysics, Chemistry and Psychology are required to take the Graduate Record Examination, including the Aptitude Test portion, and preferably one Advanced Test in a field related to the proposed area of graduate study. Applicants for admission to the graduate area in Psychology must also take the Miller Analogies Test. All other applicants for admission are urged to take the Graduate Record Examination. Information concerning the Graduate Record Examination is available from the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey, or P. O. Box 27896, Los Angeles 27, California. The following testing dates have been announced: November 19, 1960, January 21, April 22 and July 8, 1961. Prior registration is mandatory and deadlines are November 4, 1960, January 6, April 7, and June 23, 1961, respectively.

APPLICATION

Specific requirements established by each area of study are to be found below. Each applicant should consult these requirements prior to filing an application. One who seeks admittance to the Graduate School should write to the Dean of the Graduate School of Arts and Sciences, stating which area of study he or she wishes to pursue. A catalog and appropriate forms will be forwarded to the applicant. The "Application for Admission" and, if needed, the "Application for Financial Aid" should be completed and returned as soon as possible. The closing date for receipt of applications for admission is March 1, although exceptions may be made. Applicants requesting financial aid should file as early as possible. Applications for admission for the Spring Semester must be filed by December 15. It is not always possible to admit students at mid-year in all Departments. Students entering at mid-year are not normally eligible for financial aid.

The applicant is required to arrange for the forwarding of official transcripts of all undergraduate work and graduate work, if any. In addition, he must have forwarded, on forms provided by the Graduate School, two letters of recommendation, preferably from professors with whom the applicant has studied in the field of his proposed area of study. An applicant who has engaged in graduate study elsewhere should request at least one of the recommendations from a professor with whom he has done graduate work.

Applicants for admission to the Graduate Department of Music and of English and American Literature should also submit a sample of their written work.

All applications for admission must be accompanied by an application fee of \$5.00, payable by check or money order to Brandeis University. No applications will be processed until this fee is paid.

ADMISSION PROCEDURE

All applications are considered on a competitive basis. The number of students who can be admitted each year in each Department is limited so that the Graduate School may operate effectively under its distinctive principles of individualized study and apprenticeship. Consequently admission may sometimes be denied to qualified persons. The minimum standards of admission merely determine whether the applicant will qualify for a place in the group from which final selections will be made. Selections are based on the applicant's ability to do graduate work of high quality as shown by the distinction of his previous record, particularly in his proposed area of study; by the confidential letters of recommendation submitted in support of his application; and by his adaptability to the particular graduate programs offered by Brandeis University. In addition, knowledge of foreign languages, relevant practical experience in the field, samples of work, the results of the Graduate Record Examination, and indications of character, are considered. In order for the results of the Graduate Record Examination to be considered, the applicant should take the examination no later than January, 1961.

Each application for admission with all supporting records is first examined by the Department or Committee responsible for the graduate area to which the applicant seeks admittance. The Department or Committee makes a recommendation to the Dean of the Graduate School as to which applicants should be selected for admission and for financial aid. The Dean, in association with a Faculty Committee on Admissions and Awards, reviews all applications in the light of departmental recommendations, and, on behalf of the Committee on Admissions and Awards, informs each applicant of the results of the competition. Applicants for admission will be notified by April 1.

ACCEPTANCE

A student who has been accepted for admission to the Graduate School will be notified by a letter specifying the date by which he must accept the offer of admission and awards, if any. If a student selected for admission indicates that he does not intend to accept the offer, or if he fails to reply by the date specified, his admission expires and another applicant may be accepted in his place.

Students who are accepted must provide the Graduate School Office with an official final transcript of their undergraduate record and of any graduate work that was in progress at the time of acceptance. In addition, students who are accepted are required to complete and return a Medical Questionnaire and a health

insurance form which will be sent with notification of acceptance. All acceptances are conditional on subsequent approval by the University Health Office. All persons admitted to the Graduate School must give evidence of their physical and psychological capacity to carry on their studies.

If, after having been admitted, a student cannot attend, he should notify the Dean of the Graduate School as soon as possible. If such a student wishes to be admitted for a subsequent academic year, he must request reactivation of his application at the appropriate time and bring it up to date.

An applicant who has been denied admission may reapply in a later year, particularly if he has had further training which would strengthen his application or if he can submit additional letters of recommendation.

Admission to the Graduate School does not imply that the successful applicant has been accepted as a candidate for a graduate degree. Superior performance at Brandeis University is essential. Admission to candidacy for the M.A. or M.F.A. is granted by the Graduate Department or Committee administering the program of study. Admission to candidacy for the Ph.D. is granted by the Graduate Council upon the recommendation of the Department or Committee administering the program of study.

READMISSION

Admission is valid for only one academic year. A student's record is reviewed annually, and he may be denied readmission. Students completing the requirements for the M.A. or M.F.A., and students who already hold a Master's degree but who have not yet been admitted to candidacy for the doctorate, must make formal application for readmission by April 1 of each year if not requesting financial aid, or by March 1 if requesting financial aid. The application for readmission must be filed with the Graduate School Office.

Residence Requirements

Residence requirements for all graduate degrees are computed by determining the amount of registration for credit, the tuition charges, and the time elapsed in the course of study. Part-time students and teaching assistants pursuing part-time programs of study for credit complete their residence requirement when their fraction programs (one quarter, one half, three quarters) total the amount required of a full-time student for any given degree. Credit toward residence requirements will not be granted for work taken during the summer in the Brandeis Summer School. However, if such work is taken, those courses and grades will be entered on the student's permanent record card, and a Department may credit summer school work taken at Brandeis as partial fulfillment of degree requirements, but not of residence requirements.

RESIDENCE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS

The minimum residence requirement for all students is one academic year on a full-time graduate credit program at the full tuition rate; or the equivalent thereof in part-time study.

RESIDENCE REQUIREMENTS FOR THE DEGREE OF MASTER OF FINE ARTS

The minimum residence requirement for all students is three academic semesters on full-time graduate credit program for each semester, at the full tuition rate for each semester; or the equivalent thereof in part-time study.



Kalman Science Building

An active graduate research program . . .

Friedland Science Center





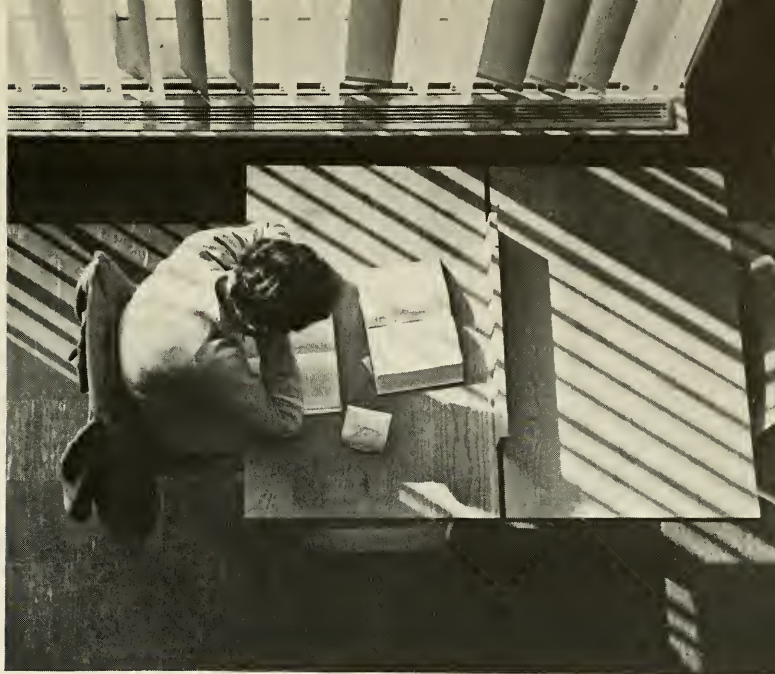
Student artists and the master . . .

Marc Chagall discusses mural for Brandeis

An evening seminar . . .

in Rabb Graduate Center





A study in concentration . . .

in Goldfarb Library Building

Visiting quartet entertains . . .

concert for students and faculty



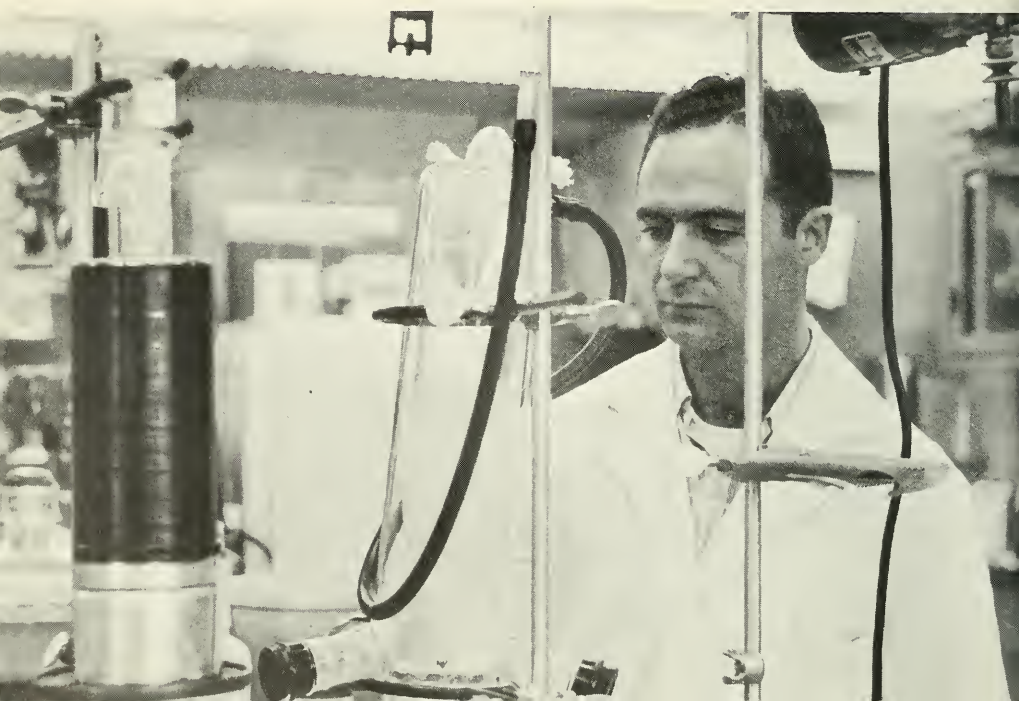


A busy center . . .

Goldfarb Library Building check out desk

Medical research . . .

key to age-old mysteries



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RESIDENCE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

The minimum residence requirement for all students is two academic years on a full-time graduate credit program for each year, at the full tuition rate for each year; or the equivalent thereof in part-time study.

CREDIT FOR WORK DONE ELSEWHERE

Graduate work taken elsewhere may not be counted toward fulfillment of the residence requirement at Brandeis University for the degree of Master of Arts, although a Department may accept work taken elsewhere in partial fulfillment of specific course requirements for the degree. Not more than one semester of residence credit for work taken elsewhere may be counted toward fulfillment of the residence requirement for the degree of Master of Fine Arts. Not more than one year of residence credit for work taken elsewhere may be counted toward fulfillment of the residence requirement for the degree of Doctor of Philosophy.

A student admitted to a Ph.D. program at Brandeis University who has done graduate work elsewhere may file an application to have his work at that institution counted toward fulfillment of residence requirements. However, language requirements, qualifying and comprehensive examinations, the dissertation and the final oral examination, and other such requirements, must be fulfilled while enrolled at Brandeis.

To be eligible for receiving credit toward fulfillment of residence requirements for work taken elsewhere, a student must complete at least one semester's residence at Brandeis as a full-time student. He may then file an "Application for Credit for Graduate Work Done Elsewhere." The completed application should be submitted to the Graduate School Office which will advise the student of the action taken on his application. An applicant will not necessarily be given the credit he requests. Indeed, each Department reserves the right to require of any student work in excess of its minimum standards to assure thorough mastery of his area of study. In any case, every candidate for the Ph.D. degree must complete at least one year of residence at Brandeis as a full-time student, or the equivalent thereof in part-time study.

FULL-TIME RESIDENT STATUS

A full-time student is one who devotes his entire time, during the course of the academic year, to a program of graduate work at Brandeis University, to the exclusion of any occupation or employment. In exceptional cases, however, a student may accept outside employment with the approval of his Department Chairman.

A full-time program may include a combination of teaching and research assistance, work leading to the fulfillment of degree requirements, such as preparation for qualifying, comprehensive, and final examinations, or supervised reading and research, or the writing of M.A. theses and Ph.D. dissertations, as well as regular course work.

A full-time resident student may take as many courses for credit in any semester as are approved by his Department Chairman, but no student may receive credit for nor be charged for more than a full-time program in any semester. Thus, the minimum residence requirement for any degree may not be satisfied by an accelerated program of study nor by payment of more than the full-time tuition rate.

Ph.D. candidates and students for whom the M.A. and M.F.A. degrees are **terminal** degrees may continue as full-time students upon completion of their residence requirements by registering at the post-residence fee (see p. 37).

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PART-TIME RESIDENT STATUS

A part-time student is one who devotes less than his entire time to a program of graduate work at Brandeis University. He may register for a credit program of one quarter, one half, or three quarters time. A part-time student may engage in outside employment with the permission of his Department Chairman, who may restrict the time permitted for such employment.

Students wishing to pursue part-time resident study leading to a graduate degree must explain in writing, at the time they seek admission, why full-time study is not possible. An enrolled student receiving financial aid from the University, who wishes to change his status from a full-time to a part-time resident, must file with the Graduate School Office an explanation of why full-time study is no longer possible.

Special Students

On occasion, properly qualified persons who wish to take courses without working for a degree will be admitted. Special students are ineligible for financial aid by the University. A special student who subsequently wishes to change his status to that of a part-time or full-time student working for a degree must apply for admission as a resident student. He must file a special petition if he wishes credit to be awarded for any work previously taken at Brandeis as a special student. Credit for such work may be given in exceptional cases.

Registration

Every resident student must register in person at the beginning of each semester, whether the student is attending regular courses of study, carrying on research or independent reading, writing a thesis or dissertation, or utilizing any academic service or facility of the University. Students who have completed their residence requirements and who wish to utilize any academic service or facility of the University must also register.

There is a charge of \$10.00 if registration is not completed at the time specified in the Academic Calendar for the Graduate School.

Registration consists of the payment of all fees for the semester and the filing of a Program Card and other required forms duly filled out.

PROGRAM OF STUDY

Before filing his Program Card, the student should plan his program of study in consultation with the Chairman of his Department. All courses for which the student registers for credit must be listed on the Program Card.

Audited courses must also be listed, noted as "Audit," and the Program Card must be signed by instructors of such courses.

A graduate student may not normally register for an undergraduate course (numbered below 100) in his own area for degree or residence credit unless he secures the signed approval of both the instructor of that course and his Department Chairman. The student must then petition the Dean of the Graduate School for the desired credit and receive his approval before or at the time of registration. Credit will not be given for undergraduate courses that are taken to make up deficiencies in the student's preparation for a graduate program of studies, nor

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will credit ordinarily be given for language courses that are not part of the student's program of studies. Under no circumstances may a student receive credit toward completion of degree or residence requirements for courses undertaken to aid in the completion of language requirements. Scholarship students may not apply their scholarships toward the remission of tuition for undergraduate courses taken to remedy deficiencies. The completed Program Card must be signed by the Department Chairman before submission at registration and the Department Chairmen will certify whether the program of study is full-time or part-time, and, if part-time, whether one quarter, one half, or three quarters time. Full-year courses must be re-entered on the Program Card at Spring Registration and they ordinarily may not be dropped at mid-year. A student wishing to drop a full year course at mid-year must petition the Dean of the Graduate School for permission, after receiving the written approval of the instructor of the course and of the Chairman of his Department. No student may register at mid-year for a full year course without the written approval of the instructor of the course and his Department Chairman.

CHANGE OF PROGRAM

Once registered, a student who wishes to add or drop a course or otherwise change his program of study must obtain the proper form for that purpose from the Graduate School Office and return it when properly filled out. Credit will not otherwise be given for the courses changed, and the student renders himself liable to a \$5.00 fine.

REGISTRATION IN TERMS OF TIME

An advanced student, one who has completed one full year of residence, either by graduate work at Brandeis or by receiving credit for graduate work done elsewhere, may register in terms of time, subject to the signed approval of his Department Chairman. His Program Card must indicate that he is registering full time or a specific fraction thereof (one quarter, one half, or three quarters).

Registration in terms of time is a device that helps to individualize programs of study and permits increased freedom for independent research for the advanced graduate student. Registration in terms of time frees the student to pursue a program of study that partially accepts or bypasses altogether the system of formal courses, although a student registering in terms of time will usually register for an advanced research or dissertation course. His time will be spent in such research and reading as will be most beneficial to his development as a scholar.

Auditing Courses

The privilege of auditing courses without fee is extended to all regularly enrolled graduate students except those classified as "Special Students." Special students may audit courses by paying for them at the same rate as though they were taken for credit. No course may be audited without the permission of the instructor. An auditor is merely a listener. He may not participate in any class work, nor take examinations, nor receive evaluation from the instructor; no credit is granted for an audited course.

Refunds, Leave of Absence, Withdrawal

REFUNDS

The only fee which may be refundable, in part, is the tuition fee. No refund of the tuition fee will be made because of illness, absence, or dismissal during the academic year. If a student withdraws within 30 days from the beginning of classes, he may petition the Office of University Finance for a partial refund of tuition. A refund may be denied without any reason for such denial being stated.

LEAVE OF ABSENCE

Students who have not completed their residence requirements may petition for leave of absence. The petition must have the approval of both the Chairman of the Department and the Dean of the Graduate School. Leave of absence up to one year will normally be granted to students in good academic standing who present compelling personal reasons or need to do work off campus in connection with their graduate studies.

WITHDRAWAL

A student who wishes to withdraw from the Graduate School at any time before the end of the academic year must give immediate written notice to his Department Chairman and to the Dean of the Graduate School on a form provided by the Graduate School Office. Failure to comply with this procedure for withdrawing may subject the student to dishonorable discharge, refusal of readmission, cancellation of the privilege of securing an official transcript of his record, and, in the case of a student withdrawing within thirty days of the beginning of classes, loss of eligibility for partial refund of tuition. Such a student must pay tuition for the full semester. Permission to withdraw will not be granted if the student has not discharged all financial indebtedness to the University or has not made arrangements for subsequent payment to the satisfaction of the Office of University Finance.

Exclusion, Dismissal, or Expulsion

The University reserves the right to dismiss or exclude at any time any students whose character, conduct, or academic standing, or financial indebtedness it regards as undesirable, and without assigning any further reason therefor; neither the University nor any of its Trustees or officers shall be under any liability whatsoever for its disciplinary action, exclusion or dismissal.

The University also reserves the right to revoke, cancel or reduce at any time any financial or honorific award made to any graduate student, for character, conduct, academic standing, or financial indebtedness regarded by the University as undesirable, and without assigning any further reason therefor; neither the University nor any of its Trustees or officers shall be under any liability whatsoever for cancelling, revoking, or reducing any award.

Grades and Course Standards

Graduate students are expected to maintain records of distinction in all courses. Letter grades will be used in all courses in which grading is possible. In thesis or research courses, if a letter grade cannot be given at the end of every semester or academic year, "Credit" or "No Credit" may be used. "No Credit" and any letter

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grade below "B minus" are unsatisfactory grades in the Graduate School. A course in which the student receives an unsatisfactory grade will not be counted for graduate credit. At the end of each academic year, the Graduate School will issue to all registered students a report of their grades and of degree requirements that have been satisfactorily completed.

Absence from Examinations

A student who is absent from a midyear or final examination without an accepted excuse will receive a failing grade for that examination. No student may be excused from such examination unless for emergency or medical reasons, nor may he be excused if he was able to notify the instructor in advance and failed to do so. Cases involving absence are referred to the Chairman of the Department. The Department will decide whether a make-up examination shall be allowed. If a make-up is allowed the instructor will notify the Dean of the Graduate School who will arrange for its administration.

Incompletes

A student who receives a grade of "Inc." (incomplete) must satisfactorily complete the work of the course in which the "Inc." was given in order to receive credit for the course and a letter grade. An "Inc.", unless given by reason of the student's failure to attend a final examination, must be made up no later than the end of the term following the term in which it was received. When failure to take a final examination has resulted in an "Inc.", resolution of that grade to a letter grade must occur within six weeks of the beginning of the next academic semester or the potential course credit will be lost. If additional time is required by a student to settle an incomplete grade he may petition the Dean of the Graduate School for an extension of time, provided the petition is signed by the instructor of the course and by the Department Chairman. Such a petition must be filed prior to the expiration of the deadline for making up an incomplete.

Financial Assistance

To help students whose records indicate scholarly promise, the University makes available a variety of awards and work opportunities. No student is eligible for aid unless he files with the Graduate School Office an "Application for Financial Assistance" by March 1. In exceptional circumstances applications received from prospective students later than March 1 may be given consideration. All scholarships and fellowships are granted for one academic year; therefore, a registered student who holds a scholarship or fellowship must apply for a renewal by filing the "Application for Financial Assistance" by March 1.

All awards are granted and accepted with the understanding that they may be revoked or reduced at any time for conduct or academic standing that may be regarded as undesirable.

SCHOLARSHIPS

A scholarship is an award, on grounds of scholarly ability and need, of financial credit that may be used exclusively for remission of tuition fees. Full scholarships in the value of \$1,250.00 and partial scholarships are available. Scholarship students are liable for all fees, but tuition fees in the amount of a scholarship award shall not be charged.

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FELLOWSHIPS

A fellowship is an academic award of honor to outstanding students to help them in the furtherance of advanced study and research. Fellowships carry stipends ranging up to \$2,000.00. The amount of the stipend depends upon the quality of the student's record and performance; need is also considered in most cases. A fellowship recipient must pay tuition fees unless also awarded a scholarship in an amount covering tuition. No services are required of students for fellowship or scholarship awards.

No student may hold a fellowship or scholarship for more than two years of study for the M.A. degree, for more than three years of study for the M.F.A. degree, or for more than four years of study for the Ph.D. degree. No student may receive a scholarship or fellowship after one year of study at the post-residence fee. Part-time students are ineligible for fellowship awards and are not ordinarily considered for scholarship awards. Teaching assistants who are part-time students may apply for scholarships. Priority in making awards is given to full-time students and teaching assistants. Awards are recommended by Department Chairmen to a faculty committee of which the Dean of the Graduate School is Chairman.

TEACHING ASSISTANTSHIPS

Teaching assistants are resident students in the Graduate School who do part-time teaching as part of their training and are paid a stipend in return for services rendered. The University has established teaching assistantships to enable distinguished graduate students to gain teaching experience while continuing their studies. Stipends, which vary with the hours of teaching and degree of responsibility, may reach a maximum of \$2,750.00. Teaching assistants are eligible for other awards, including scholarships and fellowships.

A full-time student who is a teaching assistant receives residence credit for, and is charged tuition for, that fraction of his program spent as a student in fulfillment of degree and residence requirements. No teaching assistant may carry more than a one half time teaching assignment. A one quarter time teaching assignment consists of about six hours of laboratory supervision per week or three hours of classroom instruction per week, or the equivalent. A graduate student who has not completed his residence requirement and is assigned to a one quarter time teaching assignment must register for at least a three quarter program of study for credit in order to be considered a full-time student. A student who has not completed his residence requirement and is assigned less than a one quarter time teaching assignment must register for a full-time program of study to be considered a full-time student. A teaching assistant may receive a larger stipend for a teaching assignment greater than one quarter time, but he is not regarded as having a one half time teaching assignment unless he is assigned twice the normal work load that is the standard for one quarter time teaching. A one half time teaching assignment requires that the student who has not completed his residence requirement must register for a one half time program of study for credit in order to be considered a full-time student. Ordinarily, only graduate students who have completed their residence requirement will be considered eligible for one half time teaching assignments. A student who needs to register for only a partial program of study to complete his residence requirement and who is assigned a teaching assistantship is regarded as a full-time student. A teaching assistant who has completed his

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residence requirement may register as a full-time student and may pursue whatever program of study and research seems necessary and desirable, subject to the signed approval of his Department Chairman, without payment of tuition fees.

First year graduate students are eligible for appointment as teaching assistants in the Sciences. In other areas, however, first-year students are rarely appointed. Foreign students are not normally eligible for appointment as teaching assistants in their first year of graduate work unless they have had training at another American university.

Teaching assistantship appointments are made by the President of the University on the recommendation of the Dean of the Graduate School who, in turn, acts on the recommendation of a student's Department Chairman. A graduate student who is interested in an appointment as a teaching assistant should write or see his Chairman. Appointments are made for periods of one year or one semester, but are renewable. All awards of teaching assistantships to incoming students are conditioned upon an interview with a University representative, prior to registration. The University reserves the right to terminate any appointment at any time for cause. Conduct, character, or academic standing that is regarded as undesirable may constitute cause, but the University need not assign any reason for the termination of an appointment at any time. All teaching assistantship appointments are made and accepted with this understanding, and neither the University nor any of its Trustees or officers shall be under any liability whatsoever for the summary termination of a teaching assistantship.

In the case of any student receiving financial aid from Brandeis University, whether in the form of a teaching assistantship, scholarship or fellowship, the approval of the Dean of the Graduate School is required, in addition to the approval of the Department Chairman, before the student may engage in outside employment. Approval is not normally granted in the case of full-time students receiving financial aid from the University.

RESEARCH ASSISTANTSHIPS

Research assistantships, which sometimes carry stipends in excess of \$3,000.00, are available in the Science areas, although first-year graduate students are not normally eligible for appointment. Application should be made to the Chairman of the Department or Committee administering the graduate program.

LOAN FUNDS

Applications for loans may be made to the Office of University Finance of the University, with the approval of the Dean of the Graduate School.

RESIDENT COUNSELLORSHIPS

Resident counsellorships, providing room, board, and remission of tuition, are available to both men and women. Interested applicants should apply to the Dean of the Graduate School no later than March 1. Appointments are made by the Dean of Students on the recommendation of the Dean of the Graduate School.

EMPLOYMENT

On occasion the University offers part-time employment to specially trained personnel. Inquiries should be addressed to the Personnel Office of the University.

Fees

All fees are payable on the dates respectively due. In exceptional cases, students may make prior arrangements with the Office of University Finance for installment payments. Any outstanding indebtedness to the University must be paid by a candidate for a degree by the first day of June prior to Commencement, or the candidate's name will be stricken from the rolls of degree candidates.

The payment of tuition fees and other fees due on the day of registration is part of the registration process. A student who is not prepared to pay such fees on the day of registration and who has not made alternative arrangements for payment, with the approval of the Office of University Finance, will be refused the privilege of registration. A registered student who defaults in the payment of indebtedness to the University shall be subject to suspension, dismissal, and refusal of a transfer of credits or the issuance of a transcript. No student who has been suspended or dismissed for nonpayment of indebtedness to the University may be reinstated until payment of all indebtedness.

Application Fee: \$5.00. Payable by all applicants for admission at the time the Application for Admission is submitted. Checks and money-orders should be made payable to the order of Brandeis University. No Application for Admission will be processed until this fee is paid. This fee is not required of Brandeis graduates.

Tuition Fee: The fees for tuition in the Graduate School are as follows:

Full-time resident students: \$1,250.00 per year, or \$625.00 per semester.

Part-time resident students:

<i>Per Semester</i>	<i>Per Year</i>	<i>Fraction Program of Study</i>
\$470.00	\$940.00	Three quarters
\$310.00	\$625.00	One half
\$155.00	\$310.00	One quarter

Special Students: \$155.00 per course per semester.

Post-Residence Fee: Students who have completed their residence requirements and who wish to continue in residence for the purpose of utilizing any academic service or University facility must register at the usual tuition rates. Teaching assistants are exempt from this fee as a matter of professional courtesy. Research assistants may petition for exemption. Other graduate students whose tuition is not being paid from scholarship or fellowship funds awarded by the University or other sources may petition the Dean of the Graduate School for a reduction of the post-residence fee to \$250.00. Students who continue to utilize any academic service or University facility after having completed residence, but who have failed to register, are subject to disciplinary action by the Dean of the Graduate School. A student who is eligible for registration on the post-residence basis may file a Program Card for full-time study, in terms of courses or in terms of time or any combination thereof, provided his Department Chairman approves of the program of study as being a full-time program and signs the Program Card.

Mixed Tuition Fee: In the event that a student needs to register for only a part-time program (one quarter, one half, or three quarters) in order to complete his residence requirements, but wishes to register for additional courses or take a fuller program of study, he shall be charged for the part-time program needed to complete his residence, plus the post-residence fee.

Late Registration Fee: \$10.00. Payable for failure to complete registration at the time announced by the Graduate School Office. (Consult the Academic Calendar.)

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Change-of-Program Fee: \$10.00. Payable by any graduate student who wishes to change his program of study later than two weeks after the first meeting of classes in each semester.

Continuation Fee: \$10.00. Payable annually by graduate students who have completed residence requirements and who are not registered during the period in which they are preparing for the completion of degree requirements. Students in this category are not eligible for leave of absence.

Master's Fee: \$50.00. A candidate for the M.A. or the M.F.A. who is subject to the Continuation Fee and who submits a Master's thesis or takes a qualifying examination in any semester following one in which he has not been in residence, shall pay the Master's Fee. The fee is chargeable only once. The Continuation Fee will be applied toward payment of the Master's Fee.

Dissertation Fee: \$250.00. Students who are not registered for the academic year in which the dissertation is submitted are subject to this fee in that year. The Continuation Fee in that year will be applied toward payment of the Dissertation Fee. A student who submits his dissertation in final form no later than the registration period of a semester following one in which he has been in residence will not be subject to this fee.

Reinstatement Fee: \$10.00. Payable by a student who, after suspension or dismissal, has been reinstated with the consent of the Dean of the Graduate School.

Transcript Fee: \$1.00. Students, former students, and graduates who request official transcripts of their record in the Graduate School are charged \$1.00 for each copy issued, after the first one which is issued free of charge. Requests by mail for transcripts must be accompanied by a check in the correct amount, payable to Brandeis University. Resident students should pay the Cashier directly and present a receipt for payment to the Graduate School Office when requesting transcripts.

Diploma Fee: \$10.00. Payable by degree candidates for each degree.

Health Insurance Fee: \$40.00. Payment of the mandatory medical fee entitles graduate students to utilize the facilities of the Health Office and to participate in the benefits of the University Student Health Plan during the academic year. The fee is payable at registration and no portion is refundable.

Waiver of Fee: A waiver of the insurance requirement may be granted upon presentation by the student of a statement from his insurance company which certifies that similar coverage is in effect. This statement must be presented at the time of registration or the student will automatically be included under the University Student Health Plan and be billed \$40.00. A request for such waiver should be made by the student on the "Student Health Insurance" form mailed by the University with each notification of admission or readmission.

Exceptions: The University Student Health Plan is optional for Special Students. The University Student Health Plan becomes optional for degree candidates, except resident counsellors, who are citizens of the United States and have completed their residence requirements.

Foreign Students

Graduates of foreign colleges and universities who have completed the equivalent of an American degree of Bachelor of Arts may apply for admission and for financial assistance. Foreign applicants should enclose with the official "Application

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for Admission" such original documents or official certified copies indicating the nature and scope of their formal educational background.

A student whose native language is not English should not apply unless he can write, speak, and understand English with enough competence to pursue a regular program of graduate study in an American university. Nor should a foreign student apply for admission unless he has the financial ability to support himself in the United States. For this purpose a sum of at least \$2,400.00 will be necessary for the nine-month academic year, exclusive of expenses for travel, summer, or vacation.

Of the large number of foreign applicants who apply annually, financial assistance is available for only a few of the outstanding. Scholarships cover only tuition costs. Fellowships and teaching assistantships are helpful in meeting subsistence expenses. However, the total assistance offered is usually sufficient to cover only a portion of the student's total expenses. A foreign applicant who has not had training in an American institution of higher learning will be at a disadvantage in competing for scholarships and fellowships. Teaching assistantships are rarely awarded to foreign applicants in their first year of graduate study, and even then, only in some of the science areas.

A limited number of foreign applicants are accepted through the Wien International Scholarship Program which provides financial assistance to highly qualified graduate degree candidates. A complete description of this Program may be found on page 15 of this catalog.

It would be wise for foreign applicants who are not in the United States at the time of application to seek the assistance of the Institute of International Education. The Institute has access to funds for the aid of foreign students and helps place them at suitable universities. For information, write to the Institute of International Education, 1 East 67th Street, New York 21, New York. Students from Great Britain may apply through the English Speaking Union, whose central office is in London. The Fellowship Commission of the United States Information Service and the local American Embassy have information on travel grants for foreign students. In any case, foreign applicants are advised to apply to several American universities.

An application fee of \$5.00 should accompany the foreign student's "Application for Admission." No application will be processed until the application fee is paid. A foreign student who is registering in the Graduate School for the first time or re-registering after a leave of absence must see the Counsellor for Foreign Students before registration. Upon presentation of his letter of admission and his passport, and after completing an Alien Student Registration form, the foreign student will receive from the Counsellor for Foreign Students a pass for presentation at registration. The Counsellor is prepared to assist in all matters connected with U. S. immigration regulations.

The Counsellor for Foreign Students is Mr. C. Ruggles Smith, whose office is located in the Bernstein-Marcus Administration Center, Room 202.

A foreign student who enters the United States on a student "F" visa is expected to register at the college or university which admitted him and is the destination for which his visa was obtained. Should a foreign student be admitted to the Graduate School of Brandeis University from another American university, he must visit the District Immigration Office in the area of the school from which he is transferring and present a letter from that school stating that he has been suc-

cessfully pursuing a full course of study and that there is no objection to the transfer. He must also present his acceptance letter from the Graduate School of Brandeis University.

Employment may be granted to an "F" visa student during the school year in three situations: (1) if he has been granted permission for on-campus employment as a condition of admission, as indicated on the original Form I-20 provided by the University; (2) if his employment consists of practical training in his field of study; or (3) if his financial situation has changed since his admission, and he has been granted permission for employment, with the approval of the University, by the Immigration and Naturalization Service. Each year the Immigration and Naturalization Service delegates to the University the privilege of granting permission, on the basis of economic necessity, to "F" visa students for employment during the summer vacations. Permission for employment cannot be granted to Exchange-Visitor "J" visa students, unless the employment is practical training that is part of the program of instruction.

Housing

The University does not offer graduate housing facilities except to a limited number of unmarried women. The Housing Office, however, attempts to serve as a clearing house for rooms and apartments available in Waltham and nearby Greater Boston communities.

Dining Facilities

Graduate students may sign for the twenty-one meal contract or the fifteen-meal contract in either Kutz Hall or the Sherman Student Center Dining Hall. Arrangements must be made with the Steward's Office. Individual meals may be purchased at either dining hall. Light snacks are served at the Castle Snack Bar.

Health

Payment of the medical fee entitles graduate students to utilize the facilities of the Health Office and to participate in the benefits of the University Student Health Insurance Plan.

The health insurance program helps defray expenses during the academic year for treatment beyond the scope of the Health Office. A brochure outlining the details of this program may be obtained at the Health Office. It should be noted here, however, that coverage is not provided for pre-existing conditions, extraordinary cases, psychiatric cases, optical and dental services, or special materials.

Within the limitations of the insurance coverage, fees of outside doctors and hospitals will be processed for payment only when consultations or hospitalization have been authorized by the University Health Office in advance on a form provided for this purpose. The University is not responsible for off-campus medical and hospital care sought by students or their parents on their own initiative. Students are urgently requested to read the Health Office pamphlet with great care.

Every student is required to complete a Health Questionnaire (which is mailed by the University) before admission to the University. In addition, a health examination by the University physician must be taken at the appointed time early in the academic year of admission. Failure to meet this appointment will result in a fine of \$5.00.

General Degree Requirements

The following general requirements apply to the awarding of graduate degrees in all areas of study. For the specific requirements of each area of study, students should consult the appropriate section of this catalog.

MASTER OF ARTS

In order to qualify for a Master's degree, the student must complete the equivalent of one full year of graduate study at Brandeis University, ordinarily computed at a minimum of twenty-four semester hours of approved study. Each course meeting three hours per week grants three credits per semester. Certain Departments may at their option require more than twenty-four hours of graduate study. All Departments offering Master's programs require that the candidate demonstrate a reading knowledge of at least one foreign language and pass satisfactorily a general or qualifying examination which, at the Department's discretion, may be in one or more parts and may be written, oral, or both. Where a thesis is required for the Master's degree, two copies must be submitted to the Department Chairman in final form no later than May 1. The Master's degree must be earned within four years from the inception of graduate study at Brandeis University.

For specific programs of study, language requirements, examinations, and thesis requirements, consult the section of the catalog dealing with the proposed area of study.

MASTER OF FINE ARTS

In order to qualify for the degree of Master of Fine Arts in Music, the candidate must complete with distinction thirty-six semester hours of work at the graduate level, and must meet the language and other requirements for the degree outlined on pages 84-85. Two bound copies of the thesis must be submitted by May 1 of the year in which the degree will be received. The Master of Fine Arts degree must be earned within five years from the inception of graduate study at Brandeis University.

DOCTOR OF PHILOSOPHY

In order to qualify for the degree of Doctor of Philosophy, a student must ordinarily complete a minimum of three years of graduate study, including two full years of residence and a third year devoted to the preparation of a doctoral dissertation. Under certain conditions, credit for advanced standing will be granted for work taken in residence in graduate schools of other universities. Each Department or Committee reserves the right to require prospective candidates for the degree to perform work in excess of its minimum standards to assure thorough mastery of the area.

Prospective candidates, except in Psychology, must demonstrate proficiency in at least two foreign languages. In all areas of study, the student must satisfactorily pass a general or qualifying examination which, at the Department's discretion, may be in one or more parts and may be written, oral, or both. In addition, all prospective candidates must write a doctoral dissertation and defend it in a final oral examination.

To be eligible for the receipt of the Ph.D. degree in any given year, the student must have (1) been admitted to candidacy for the doctorate, (2) completed all residence requirements, and (3) passed all language examinations, by the close of the first term of the academic year in which the degree is to be conferred. Doctoral dissertations must be submitted by April 1. In addition, notification that

THE GRADUATE SCHOOL OF ARTS AND SCIENCES

the doctoral dissertation has been approved and that the dissertation examination has been passed must have been communicated to the Dean of the Graduate School no later than May 15 of the year in which the degree is to be conferred. The Doctor's degree must be earned within eight years from the inception of graduate study at Brandeis University.

For specific programs of study, language requirements, examinations, and dissertation requirements, consult the section of the catalog dealing with the area of study.

LANGUAGE REQUIREMENTS

A reading knowledge of at least one foreign language is required of all students engaged in programs of study leading to the M.A. or M.F.A. degrees. A reading knowledge of two foreign languages is required, except in psychology, of all students engaged in programs of study leading to the Ph.D. degree. Graduate Departments may require degree candidates to demonstrate proficiency in additional languages. Each Department determines which languages are acceptable as satisfying the foreign language requirements.

Students are expected to satisfy the language requirements as soon as possible. The completion of the language requirements at another university does not relieve the candidate from the Brandeis requirements. The Department of European Languages administers the language examinations for students in the History of Ideas and English and American Literature programs. All other Departments conduct their own language examinations.

Language examinations are offered by all Departments at least twice each year, in November and March. The student should present himself for at least one language examination in his first year.

A student who has not passed an examination in at least one foreign language during his first year of study will not be eligible for financial aid for the second year. All language examinations must be passed by November of the academic year in which the Ph.D. degree is expected to be conferred.

Many Departments require language examinations to be passed at an earlier time than specified in these provisions. Special requirements will be found in the departmental statements included in this catalog.

ADMISSION TO CANDIDACY

A student who (a) has demonstrated a knowledge and mastery of the subject matter of his field at a level satisfactory to his Department or Committee, (b) has indicated a capacity for independent research of high quality, and (c) has satisfactorily completed all specific Departmental or Committee requirements for admission to candidacy may, at the recommendation of the Department or Committee, be admitted by the Graduate Council to candidacy for the degree of Doctor of Philosophy.

DISSERTATION AND FINAL ORAL EXAMINATION

Three copies of the doctoral dissertation, as well as an abstract of the dissertation not to exceed six hundred words in length, should be submitted to the Department or Committee Chairman no later than April 1 of the year in which the Ph.D. degree is to be conferred. The style and format of all dissertations are determined by the respective Departments. The Chairman will then appoint two or more

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readers, besides the principal supervisor, to read the candidate's dissertation. Certification of the approval of the dissertation by these readers will be communicated to the Dean of the Graduate School and to the Chairman of the Department or Committee. The Chairman will then schedule a final oral examination* and notify both the Dean of the Graduate School and the candidate of the time and place of the examination.

The dissertation, upon receiving approval by the readers, must be deposited in the Office of the Graduate School, where it will be available to all interested members of the faculty, at least two weeks prior to the final oral examination.

The Dean of the Graduate School will publish in the *University Gazette* the time and place of a candidate's final oral examination and the title of his doctoral dissertation. The final oral examination will be open to any member of the faculty engaged in graduate instruction and invited faculty members of other institutions.

The Examination Committee, appointed by the Chairman of the Department, must be composed of at least three members of the faculty. At least one member of the examining committee shall be from a graduate area outside of the student's own, although preferably from a related area.

The examination may be restricted to a defense of the dissertation or may cover the whole field of the dissertation. The candidate will be notified by his Department or Committee of his responsibility for coverage at the examination.

A report, signed by the Examination Committee, certifying the candidate's successful performance on the final oral examination, will be submitted to the Dean of the Graduate School no later than May 15 of the year in which the degree is to be conferred.

APPLICATION FOR GRADUATE DEGREES

Candidates for the M.A., M.F.A., and Ph.D. degrees must file with the Graduate School Office an application for the degree no later than April 1 of the academic year in which the degree is to be conferred. Upon the written recommendation by a candidate's Department or Committee that his application be approved, his record will be reviewed by the Graduate Council which recommends him to the University Faculty for the degree. In case of failure or withdrawal from candidacy in any year, the student must reapply by filing a new application in a later year.

DEPOSIT AND PUBLICATION OF DISSERTATION

By May 22 at the latest, the candidate must deposit two copies of his finished dissertation, including the original typescript, with the Librarian of Brandeis University, for binding. Both copies must have the signed approval of the dissertation supervisors and readers. One copy will be retained by the Library, the other by the Department. If the candidate wishes a copy bound for his personal use, he should deposit three copies. The binding costs, payable by the student, will be assessed by the Librarian. The University requires publication of all doctoral dissertations in micro-form, the expense for which is borne by the student. Publication of the students' research makes it immediately available to the scholarly world.

The title page of the dissertation must bear the date and the words, "A Dissertation Presented to the Faculty of the Graduate School of Arts and Sciences of Brandeis University, Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy."

* In the Department of English and American Literature, the preliminary dissertation examination may fulfill this requirement.

Areas of Study and Courses

All courses meet for three hours a week unless the course description indicates otherwise. The presence of "a" in the course number indicates a half course given in the Fall term; "b" indicates a half course given in the Spring term; "aR" or "bR" indicates a course given in the Spring term which is identical with the "a" or "b" course of the same number given in the Fall term; the use of "c" after a course number indicates that the course is administered as a half course meeting throughout the year.

Half courses normally carry three credits and full courses, six. Exceptions are noted under the individual course descriptions. Additional credits are given for laboratory hours, as indicated in the course descriptions.

The University reserves the right to make any necessary changes in the offerings without prior notice.

Anthropology

OBJECTIVES

The graduate program in Anthropology is designed primarily to train students at the doctoral level. The objective is to provide the student with a broad understanding of the four major fields of Anthropology—but with particular stress on Cultural Anthropology—and to prepare the student for independent research and scholarship. Accordingly, extensive field-work experience, with guidance in the field, is required and insured as an integral part of the doctoral program.

ADMISSION

Students accepted for graduate work in Anthropology need not have an undergraduate major in Anthropology or Sociology-Anthropology. However, the student without previous training in Anthropology, if admitted, will be required to take additional courses, as determined by the Department, to complete his residence requirements. Students should have a reading knowledge of one foreign language.

FACULTY

Professor ELIZABETH F. COLSON, *Chairman*: Central and East Africa. Northwestern United States. Social structure.

Visiting Professor MAX GLUCKMAN: Social Anthropology. Africa. Primitive Law.

Associate Professor ROBERT A. MANNERS: East Africa. The Caribbean. Southwestern United States.

Assistant Professor STANLEY DIAMOND: West Africa. The Middle East. Social organization.

Assistant Professor ROBERT EVANS: Linguistics.

Visiting Assistant Professor ALFRED HARRIS: Primitive religion. Modern culture.

Mr. GEORGE L. COWGILL: Prehistoric Archeology. Civilizations of South America.

AREAS OF STUDY AND COURSES

DEGREE REQUIREMENTS

MASTER OF ARTS

Students are required to complete twenty-four course credits, a thesis, and to demonstrate proficiency in one foreign language. There will be a six-hour qualifying examination for all students at the conclusion of the first year of study to cover the work of the first year; only those successfully passing this examination will be eligible for the M.A.

DOCTOR OF PHILOSOPHY

Admission to the Program—Students will be permitted to pursue a graduate program of study beyond the M.A. only on successful completion of a six-hour qualifying examination.

Program of Study—Ph.D. candidates must complete forty-eight course credits beyond the A.B. and present a dissertation. No more than nine to twelve course credits may be taken in related fields.

In the first year of residence, a student will be required to take the equivalent of a full course in the ethnology of a given geographic area. By the end of two and a half years, he must have completed the following additional courses: Anthropology 102a and b, Anthropology 105a and b, Anthropology 155b.

Language Requirements—A reading knowledge of two acceptable foreign languages is required of all Ph.D. candidates. Proficiency in at least one of these languages must be demonstrated before the year of field work is begun.

Admission to Candidacy—A student is admitted to candidacy on his successful completion of a general examination which is usually taken after all course requirements have been met. The examination is an intensive two-hour oral inquiry covering any aspect of Anthropology, conducted by a panel of all faculty members of the Department.

Field Work—Each student who has passed the qualifying examination with a satisfactory grade and who plans to go on towards the Ph.D. will take part in a three-month summer field training program under the direction of a faculty member.

As soon as is feasible after completion of the two and a half years of residence, the Ph.D. candidate will be expected to begin a full year of field research which will ordinarily form the basis of his dissertation.

Dissertation and Defense—The degree of Ph.D. will be awarded only after successful defense of the dissertation.

Courses of Instruction

ANTHROPOLOGY 102a. Anthropological Linguistics

The languages of the world. Speech communities. Phonetics. Phonemics. Morphology. Grammatical terms. Syntax. Semantics. Word formation and derivation. Change of vocabulary. Borrowings. Descriptive, historical and comparative linguistics. Training in the recording and analysis of unwritten languages.

Mr. Evans

ANTHROPOLOGY 102b. Anthropological Linguistics

Continuation of Anthropology 102a.

Prerequisite: Anthropology 102a.

Mr. Evans

***ANTHROPOLOGY 105a and b. Problems in Human Variation**

The field of physical anthropology. The first semester will deal primarily with human evolution, the fossil record and other evidence of the emergence of *homo sapiens* from lower hominoid forms. The second semester will be concerned with the biology of the modern species, ontogeny, genetics, osteology, anthropometry, and systems of classification.

ANTHROPOLOGY 106a. Primitive Religion

The function, forms, and content of religion in primitive society. Various theoretical approaches to the study of primitive religion. *Mr. Harris*

***ANTHROPOLOGY 107b. Applied Anthropology**

The role of the anthropological technician in industry and in programs of technical and social development.

ANTHROPOLOGY 109a. Methods and Results in Prehistoric Archeology

A survey of the field of prehistoric archeology and its role as a branch of anthropology. Attention will be given to the techniques of archeological field work and to methods of interpreting data, as well as to some substantive findings of archeology, with illustrations drawn from significant archeological regions around the world. *Mr. Cowgill*

ANTHROPOLOGY 115a. Origin of the State

An examination of the processes through which early States have evolved from kin-based or "tribal" societies in the primitive world. The various classic theories of the State will be considered in the light of anthropological evidence. *Mr. Diamond*

ANTHROPOLOGY 115b. Origin of the State

Continuation of Anthropology 115a.

Mr. Diamond

ANTHROPOLOGY 119a. Modern Cultures

Research seminar. Problems and limitations of anthropological analysis of modern cultures; the community study method and its use in dealing with complex societies. Intensive study of cases from contemporary anthropological materials. *Messrs. Manners and Harris*

ANTHROPOLOGY 119b. Modern Cultures

Continuation of Anthropology 119a, with added use of informants from foreign areas.

Anthropology 119a not a prerequisite.

Messrs. Manners and Harris

***ANTHROPOLOGY 120a and b. Civilizations of Middle America**

The history and ethnology of the high civilizations of Middle America: archeological background and history to the Spanish Conquest; Maya and Aztec social organizations and politics of the sixteenth century and colonial periods.

ANTHROPOLOGY 121b. Civilizations of South America

History and ethnology of the high civilization of South America. *Mr. Cowgill*

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

***ANTHROPOLOGY 152a. Culture and Personality**

Universal, socio-cultural and idiosyncratic determinants of personality formation. Cultural values and behavioral regularities in homogeneous and heterogeneous societies. Evaluation of current theory and methodology.

ANTHROPOLOGY 155b. Method and Theory in Social Anthropology

The development of anthropological theory, major present-day trends and their relation to problems of research.

Miss Colson

***ANTHROPOLOGY 157b. Primitive Philosophy**

Epistemological and ontological perceptions and conceptions in characteristic primitive cultures. The approach is comparative and historical.

ANTHROPOLOGY 201a and b. Introduction to Graduate Study in Anthropology

General survey course covering the various fields of anthropology.

Required of all graduate students.

Miss Colson

ANTHROPOLOGY 202a and b. Graduate Seminar in Anthropology

Consideration of selected field studies.

Required of all graduate students.

To be announced

ANTHROPOLOGY 290-297. Readings and Research in Anthropology

Mr. Diamond

290b. Research Problems in Archeology

292b. Research Problems in Linguistics

293a. Problems and Methods of Documentary Analysis

294b. African Research Seminar

295. Research Seminar on American Indians

296b. Areal Research Seminar: *required for those who are to take summer field trip.*

297. Readings in Anthropological Theory

Staff

ANTHROPOLOGY 299. Anthropological Colloquium

To be announced

ANTHROPOLOGY 400. Dissertation Research

Independent research for the Ph.D. degree.

Staff

* Not to be given in 1960-61.

Biochemistry

OBJECTIVES

The graduate program in Biochemistry leading to the degree of Doctor of Philosophy is designed to equip the student with a broad understanding of the chemistry involved in biological processes and to train him to carry out independent original research. Although the student will be primarily responsible for a comprehensive understanding of biochemical phenomena, he will be encouraged to acquaint himself with the disciplines of biology and chemistry. Research and experimental projects rather than formal course training will be emphasized. However, the student will be required to register for basic biochemistry, biochemical techniques, intermediary metabolism, and biochemistry seminars. The choice of advanced biochemistry courses and those of other scientific disciplines (i.e., organic chemistry, genetics, embryology, etc.) are subject to the particular interests of the student. The choice of research programs should be in areas under investigation by the faculty; some of these fields include intermediary metabolism in normal and also tumor tissues, enzymology, immunochemistry, radiobiology, biochemical genetics, protein chemistry, plant and virus metabolism, problems in growth and differentiation, photobiology, microbial metabolism, and organic biochemistry.

ADMISSION

The general requirements for admission to the Graduate School, given in an earlier section of the catalog, apply to candidates for admission to this area of study. Applicants for admission to Biochemistry are also required to take the Graduate Record Examination. The student's undergraduate curriculum should include some fundamental courses in biology and chemistry which will be subject to final staff approval.

FACULTY

Professor NATHAN O. KAPLAN, *Chairman*: Intermediate metabolism. Biochemical basis of chemotherapy. Anti-enzyme action. Molecular heterogeneity of enzymes. Changes in structure of enzymes during adaptation, differentiation, mutation, and development.

Visiting Professor ABRAHAM GOLDIN: Cancer chemotherapy. Synergistic action of drugs. Biochemical effects of transplantable tumors.

Professor MARTIN D. KAMEN: Radiobiology. Photosynthesis. Energy transfer mechanisms. Cytochrome chemistry. Physical biochemistry.

Professor WILLIAM F. LOOMIS: Biochemistry of differentiation and growth with special reference to primitive animal systems. Role of $p\text{CO}_2$ in biological systems. Relationship of hydra to single cell systems grown in tissue culture.

Associate Professor WILLIAM P. JENCKS: Conversions of chemical to mechanical energy. Model systems for energy transfer reactions. Involvement of energy-rich phosphate compounds in muscle metabolism.

Associate Professor LAWRENCE LEVINE: Immunochemistry. Action of complement and properdin. Immunological studies of protein structure. Protein replication on viruses. Antibody synthesis *in vitro*.

AREAS OF STUDY AND COURSES

- Assistant Professor LAWRENCE GROSSMAN: Nucleic acid metabolism in normal, tumor and virus-infected cells. Problems in biochemical replication. Action of pyrimidine analogs in chemotherapy.
- Assistant Professor MARY ELLEN JONES: Biosynthetic mechanisms. Role of carbamyl phosphate in microbial and mammalian systems. Metabolic pathways in differentiation.
- Assistant Professor ROBERT E. KANE: Mechanisms of protein synthesis in cell duplication. Structure of spindle proteins in mitotic processes. Chemical embryology. Macromolecular biology.
- Assistant Professor JOHN M. LOWENSTEIN: The pathway of hydrogen in biosynthesis. The control and interaction of metabolic pathways. The mechanisms of free energy transfer.
- Assistant Professor JULIUS MARMUR: Biochemical transformation. DNA Structure and function. Biochemical genetics.
- Assistant Professor STANLEY E. MILLS: Immunogenetics. Effect of immune environment on animal and bacterial cells. Biochemical genetics.
- Assistant Professor RICHARD S. MORGAN: Relation of spatial (secondary) structure of biological macromolecules (especially nucleic acids) to their function. The spatial structure studies using x-ray diffraction and infra-red spectroscopy. Isolation of active ribonucleic acid fractions from cells engaged in protein synthesis with the aim of correlating structural features of these ribonucleic acids with their role in protein synthesis.
- Assistant Professor JOHN M. OLSON: Differentiation. Spectrofluorometry of living cells and extracts. Biological instrumentation. Kinetic analysis of biological processes.
- Assistant Professor GORDON H. SATO: Nutrition, culture, and metabolism of single mammalian cells. Virology and genetics of animal cells.
- Assistant Professor MORRIS SOODAK: Aspects of the metabolism of the thyroid gland. Mechanism of iodination and the mode of action of the goitrogenic drugs are being investigated in cell-free preparations of thyroid tissues.
- Assistant Professor HELEN VAN VUNAKIS: Protein structure of enzymes and viruses. Mechanisms of viral infectivity. Action of colichines. Mechanism of blood coagulation.
- Lecturer ROBERT F. HUTTON: Pyridine nucleotide chemistry. Molecular rearrangements. Chemistry of reduced pyridines. Chemical models for enzymatic reactions. Nuclear magnetic resonance spectroscopy. Mechanisms of organic reactions.

DEGREE REQUIREMENTS

DOCTOR OF PHILOSOPHY

Program of Study—Each doctoral candidate must satisfactorily complete the following fundamental courses: basic biochemistry, biochemical techniques, intermediary metabolism, radiobiology, biochemical research problems, and at least five of the biochemistry seminars.

Language Requirements—A reading knowledge of French and German is required. One of the language requirements must be satisfactorily completed prior to the oral qualifying examination. The second language requirement must be satisfactorily completed no later than six months following the qualifying examination.

AREAS OF STUDY AND COURSES

Qualifying Examination—An oral qualifying examination will usually come at the end of the second year, and will test the student's capacity for absorbing the information to which he has been exposed in his first two years as a graduate student. The student will be held responsible for acquiring a comprehensive knowledge of biochemistry and related subjects.

Admission to Candidacy—The qualifying examination must be passed at a level satisfactory for this degree. Admission to candidacy usually takes place at the end of the second year of study.

Dissertation and Defense—A dissertation will be required which summarizes the results of an original investigation of an approved subject and demonstrates the competence of the candidate in independent research. A final oral examination based on the dissertation will be held.

Courses of Instruction

BIOCHEMISTRY 100a. Basic Biochemistry

A chemical discussion of the basic biological problems which will include topics such as: the physical and organic basis of biochemical reactions, cell physiology, intermediary metabolism, enzyme mechanisms and kinetics, energy transformations, hormones and other regulatory factors, and the basic problems of nutrition. *5 credits.*

Prerequisite: One year of organic chemistry and consent of the instructor. Some background in elementary physical chemistry is recommended but not required.

Miss Jones and Staff

BIOCHEMISTRY 101a and b. Biochemistry Techniques

Students registered for this course will participate for a period of approximately one month in the several research programs being conducted by the staff members.

Prerequisite: Biochemistry 100a (may be taken concurrently) and consent of the Department.

Miss Van Vunakis and Staff

BIOCHEMISTRY 102b. Intermediary Metabolism

The following aspects of biochemistry will be studied: metabolism of carbohydrates, citric acid cycle, fat synthesis and degradation, inorganic metabolism, amino acid metabolism, peptide and protein synthesis, metabolism of nucleic acids, vitamins, coenzymes and minerals and the respiratory chain.

Prerequisite: Biochemistry 100a and consent of the instructor.

Mr. Kaplan and Staff

Courses 200 through 212a will be offered every third year.

***BIOCHEMISTRY 200a. Physical Biochemistry**

The following will be discussed: kinetics of enzyme reactions, the measurement of free energy, heat and entropy values in biochemical systems, transition state theory and absolute reaction rates of enzyme-catalyzed reactions, and quantum mechanics.

Prerequisite: Biochemistry 100a (may be taken concurrently).

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

***BIOCHEMISTRY 202b. Chemistry of Enzyme-Catalyzed Reactions**

An introduction to the chemistry of enzyme-catalyzed reactions as compared to the uncatalyzed or chemically-catalyzed reactions will be presented; there will be some discussion of the mechanisms through which enzymes may exert their catalytic effects.

Prerequisite: Chemistry 131 and Biochemistry 100a, or equivalent, taken previously or concurrently.

***BIOCHEMISTRY 203a. Immunochemistry**

The course will deal with the mode and mechanisms of antigen-antibody interaction and the application of methods for studying these reactions in the estimation and characterization of proteins and high molecular weight polysaccharides. In addition, the principles of quantitative immunochemistry will be applied in studies pertaining to naturally derived proteins with biological activity such as enzymes and toxins.

Prerequisite: Biochemistry 100a (may be taken concurrently).

BIOCHEMISTRY 204a. Metabolism in Relation to Function

The biochemical aspects of the following processes will be considered: mechanisms of cellular growth, duplication and differentiation, bioluminescence, motility, viral infectivity and replication.

Prerequisite: Biochemistry 100a.

Messrs. Grossman and Jencks

***BIOCHEMISTRY 205a. Biochemical Genetics**

Recent advances in studies on the chemistry of inheritance will be discussed with emphasis on recombination, transformation and transduction phenomena in microorganisms. Aspects of the problem of gene function, and the enzyme formation and function, will be considered together with the contribution of microbial and animal mutants to the study of metabolic pathways.

Prerequisite: Biochemistry 100a (may be taken concurrently).

BIOCHEMISTRY 206a. Radiobiology

Among the subjects to be discussed will be elementary examinations of the properties of the nucleus and elementary particles: the techniques of radioactive measurement; the effect of ionizing radiations on chemical and biological systems; the use, potentialities, and limitations of radioactive and stable isotope tracers in biology.

Prerequisite: Biochemistry 100a, 101a and b.

Mr. Kamen

***BIOCHEMISTRY 207a. The Biochemistry of Malignancy**

A discussion of the metabolic activities of malignant tissues including the leukemias will be considered in comparison with normal tissues. Emphasis will also be placed on the discrepancies occurring in glycolysis and respiration in tumor tissues, the differences in protein structure as well as a discussion of the origins of malignancy with respect to biochemical phenomena.

Prerequisite: Biochemistry 100a (may be taken concurrently).

* Not to be given in 1960-61.

BIOCHEMISTRY 208b. Comparative Biochemistry

The differences in metabolites, metabolic intermediates, enzymes and cofactors among the various species of plants and animals will be presented. Particular attention will be given to the genesis of the more important biosynthetic and metabolic processes in the evolutionary scale. Phylogenetic variations will be related, where possible, to the environmental requirements of the organism.

Prerequisite: Biochemistry 100a.

Mr. Kaplan and Miss Jones

***BIOCHEMISTRY 209b. Physiology of the Mammalian Cell**

Factors influencing the growth, multiplication and metabolism of animal cells grown from single cell isolations will be presented. Genetic aspects of these cells will be discussed. Studies will be summarized on the infection of these cells by animal viruses from both genetic and biochemical viewpoints. The use of animal cells grown in tissue culture as a means of obtaining animal viruses will be described.

Prerequisite: Biochemistry 100a.

***BIOCHEMISTRY 210b. Protein Chemistry**

The following will be discussed: Chemical and physical properties of proteins, peptides, and amino acids; methods of determination of molecular weight, purity, and structure and isolation techniques.

Prerequisite: Biochemistry 100a and one year of physical chemistry.

***BIOCHEMISTRY 211b. Chemical Embryology**

A discussion of the metabolic dynamics concerned during the embryological development of animal cells with particular reference to the relation of fine structure to protein alterations and enzyme activity.

Prerequisite: Biochemistry 100a.

***BIOCHEMISTRY 212a. Neurochemistry**

The special chemistry and biochemistry of nervous tissue, both central and peripheral, will be discussed. Carbohydrate, lipid, protein, and nucleic acid metabolism of nervous tissue, nerve conduction, vision, and the effects of neurotropic agents on the enzymatic mechanisms of the brain, are among the topics which will be presented. Guest lecturers from the Boston area will be invited to discuss special problems.

Prerequisite: Biochemistry 100a (may be taken concurrently).

BIOCHEMISTRY 214b. Biochemistry of Viruses

The course will deal with animal, plant, insect and bacterial viruses with emphasis on biochemical mechanisms of virus DNA replication and virus protein synthesis by infected cells. Physical, chemical, immuno-chemical and genetic characterization of viruses and virus components will be discussed as well as the biochemistry of the mammalian tissue cells that support the growth of animal viruses.

Miss Van Vunakis, Messrs. Epstein, Levine and Sato

Seminars

One seminar will be given each semester. Reports and conferences concerned with various aspects of the following semester topics:

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

BIOCHEMISTRY 215b. Structure and Functional Specificity of Macromolecules

Messrs. Morgan, Marmur and Kane

***BIOCHEMISTRY 216b. Biochemical Aspects of Differentiation and Growth**

***BIOCHEMISTRY 217a. Factors Regulating Metabolic Activity**

***BIOCHEMISTRY 218b. Biochemical Problems in Duplication**

***BIOCHEMISTRY 219a. Mechanisms of Energy Transfer Reactions in Living Systems**

BIOCHEMISTRY 220a. Biochemical Basis of Chemotherapy

Messrs. Kaplan and Goldin

*** BIOCHEMISTRY 221b. Photochemical Mechanisms as Applied to Living Systems**

*** BIOCHEMISTRY 222b. Biochemical Aspects of Psychological Phenomena**

Prerequisite: Biochemistry 100a.

BIOCHEMISTRY 400. Biochemical Research Problems

Independent research for the Ph.D. degree.

Staff

Journal and Research Clubs

In addition to the formal courses announced above, all graduate students will be encouraged to participate in the Journal and Research Clubs of the Department. The Journal Club is an informal meeting of the students, staff, and postdoctorals where recent publications are discussed. The Research Club is a general meeting of the Department in which both speakers from the Department and also guest speakers will present their current investigations.

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

Biology

OBJECTIVES

The graduate program in Biology is designed to give the student an understanding of the fundamental nature of living processes, and to train him to undertake original research.

The doctorate program is planned primarily to train students at the doctoral level. At the discretion of the faculty, students who are not candidates for the Ph.D. degree may be granted a Master of Arts degree upon completion of a part of the required program.

ADMISSION

The general requirements for admission to the Graduate School, given in an earlier section of this catalog, apply to candidates for admission to this area of study. The student's undergraduate record should, ordinarily, include courses equivalent to those required of undergraduates concentrating in Biology at this institution. Students who are deficient in some of these subjects, but with otherwise superior records, may make up their deficiencies in Graduate School. In exceptional cases, students may be excused from some of these requirements. However, students with serious deficiencies must expect to be required to spend extra time in Graduate School.

It is strongly recommended that applicants take the Graduate Record Examination.

Upon being admitted to the Biology Department, each graduate student will report to the temporary graduate student adviser who will assist the student in scheduling his entrance examination in the Department, and later with his program.

FACULTY

Professor EDGAR ZWILLING, *Chairman*: Experimental embryology. Tissue interactions.

*Professor HAROLD P. KLEIN: Microbiology. Lipid synthesis. Formation of inducible enzymes.

Professor MAURICE SUSSMAN: Microbiology. Cellular differentiation. Microbial genetics.

Associate Professor HERMAN T. EPSTEIN: Radiation biology. Virus genetics. (*Graduate Student Adviser*)

*Associate Professor ALBERT KELNER: Genetics. Microbial genetics. Radiation biology.

Assistant Professor GJERDING OLSEN: Animal physiology. Endocrinology.

Assistant Professor JEROME A. SCHIFF: Plant biochemistry. Biosynthesis of chlorophyll.

Assistant Professor MIRIAM F. SCHURIN: Cytology. Cytogenetics.

Assistant Professor PHILIP A. ST. JOHN: Invertebrate physiology. Regeneration in marine worms.

Mr. CHANDLER FULTON: Embryology. Invertebrate development.

* On Leave, 1960-1961.

AREAS OF STUDY AND COURSES

DEGREE REQUIREMENTS

MASTER OF ARTS

Program of Study—The program leading to the M.A. degree in Biology focuses primarily upon the research capability of the student. Specifically, the primary requirement for the degree is the completion of a thesis based on original laboratory work which is acceptable to the Department. In general, the preparation for an original research problem will necessitate the enrollment of a student in course work. The specific number and types of courses will vary, depending upon the ultimate research problem, and will be prescribed by the Department. However, the candidate must complete the equivalent of one full year of graduate study at Brandeis University, ordinarily computed at a minimum of twenty-four semester hours of approved study.

By the end of the first year, each graduate student will choose a specific field of interest and will apply to the Chairman of the Department for a permanent adviser to be assigned by the Department. This adviser will serve as the Chairman of a Committee of at least three Departmental staff members which will advise the student on courses to be taken and guide the student throughout the thesis problem.

Language Requirements—The Department also requires every candidate to demonstrate a reading ability in French or German, or another foreign language acceptable to the Department. An examination demonstrating reading ability in the foreign language must be taken prior to the completion of thesis work.

Qualifying Examination—At the discretion of the student's advisory committee, a qualifying or comprehensive examination may be required.

DOCTOR OF PHILOSOPHY

Program of Study—All students are required to take a group of courses which will acquaint them with the principles and techniques of differentiation, genetics, cytology, microbiology, and physiology. Upon completion of this "core" curriculum, the student will ordinarily select for more intensive study a research field in which a faculty member is doing active research. At present these include endocrinology, microbial genetics, microbial physiology, plant physiology, radiobiology, virology, cytology and developmental biology.

Each student will choose his specific field of interest and will apply to the Chairman of the Department for a permanent adviser to be assigned by the Department before the end of the second year. This adviser will assist the student in planning a well-balanced course program in his specific field of interest. In addition, the adviser will ordinarily be the principal dissertation supervisor for the student and will serve as Chairman of the Dissertation Examination Committee.

Each candidate is required to complete satisfactorily: (1.) The basic courses: Biochemistry 100a, 102b; Biology 101a and b, 102a, 103b, 104b. (2.) Not less than nine additional semester hours of courses in Biology numbered 100-290, the specific course sequence to be prescribed. (3.) Additional seminar and research courses to be designated.

Language Requirements—The language requirements, a reading knowledge of French and German, must be met before the student is admitted to the qualifying examinations. In exceptional cases, another foreign language may be substituted with the approval of the Department. After consultation with his ad-

AREAS OF STUDY AND COURSES

viser, the student may arrange to take the language examinations at any time. In order to demonstrate proficiency in the language examinations, the student will ordinarily be required to translate an article, or a portion thereof, selected from a contemporary scientific publication, under the direct supervision of one of the Departmental language examiners.

Qualifying Examinations—The qualifying examination will be given in two parts. The first part, an examination on the content of the "basic courses," will ordinarily be taken within one year of the completion of those courses. The second part, emphasizing the field of specialization, will be taken upon the recommendation of the student's permanent adviser and should be completed before active dissertation work is initiated. The dates of both examinations, which may be oral or written, will be determined after consultation of the student with his adviser. The first part of this qualifying examination will be given twice each year, in September and February, by members of the Biology Department. The second part of the examination will be given by a Committee headed by the student's permanent adviser and appointed by the Chairman of the Department.

Admission to Candidacy—To be admitted to candidacy, the student must have passed his foreign language and qualifying examinations.

Dissertation—Each student will conduct an original investigation. *It is strongly recommended that the dissertation research be deferred until the student has fulfilled requirements necessary to be admitted to candidacy.* However, with the approval of the student's adviser, research courses may be elected at any time. After admission to candidacy, a Dissertation Committee will be appointed by the Chairman of the Department to consist of at least three staff members headed by the permanent adviser of the student. This Committee must approve the candidate's subject of research, will guide his research activities toward the doctoral dissertation and, in addition, will read and evaluate the completed dissertation. After submission of the dissertation, the candidate will be expected to present the principal results of his work and its significance during an examination in defense of the dissertation.

Courses of Instruction

BIOLOGY 101a. General and Comparative Physiology of Animals

After an introduction to acquaint students with current experimental findings using animal cells and tissues, the course will turn to an intensive comparison of physiological processes operating in both invertebrates and vertebrates. Particular emphasis will be placed upon coordinating and integrating mechanisms.

Prerequisite: Biochemistry 100a (may be taken concurrently).

Three classroom and three laboratory hours a week. *4 credits.*

Laboratory fee: \$15.

Mr. Olsen

***BIOLOGY 101b. Plant Physiology**

After a brief discussion of the environmental variables to which plants are subjected, such as nutrition, light, temperature and water relations, the course will deal with these variables in the cellular metabolism of these organisms. Wherever possible, the interrelationships of physiology, metabolism and biochemistry will be considered. The influence of metabolism and hormones on growth will also be discussed.

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

Prerequisite: Biochemistry 100a (may be taken concurrently).

Three classroom and three laboratory hours a week. *4 credits.*

Laboratory fee: \$15.

BIOLOGY 102a. Developmental Genetics

The nature of the genetic material and the mechanisms involved in genetic control of biological processes.

Three classroom hours. *3 credits.*

Mr. Fulton

BIOLOGY 103b. Cytology

Study of the organizational constituents of cells emphasizing the interrelation of their structure and composition to their functional role.

Three classroom hours. *3 credits.*

Laboratory fee: \$10.

Mrs. Schurin

BIOLOGY 104b. The Cellular Basis of Development

Phenomic variation and interaction at the cellular level will be considered. Developmental events in microbial cultures, morphogenetically complex Protista, Metazoa and Metaphyta will be analyzed in terms of the cellular mechanisms involved.

Three classroom hours. *3 credits.*

Laboratory fee: \$15.

Mr. Sussman

BIOLOGY 105b. Invertebrate Physiology

This course will deal with a comparative study of the physiology of receptor-effector and regulatory systems in the invertebrate animals. Nervous, digestive, endocrine, muscle, osmoregulatory, respiratory and circulatory functions will be considered.

Two lectures and six laboratory hours per week. *4 credits.*

Laboratory fee: \$15.

Mr. St. John

***BIOLOGY 106b. Plant Growth and Form**

A survey of the nature and origin of plant form: tropisms, cleavage patterns, polarity, wall structure and synthesis, growth and sex hormones, tumors, dormancy, inheritance of form, etc.

Three classroom hours: laboratory to be arranged. *4 credits.*

Laboratory fee: \$15.

***BIOLOGY 110a. Principles of Evolution**

The operation in populations of genetic and non-genetic factors that bring about evolutionary changes. Natural selection, isolating mechanisms, evidences for evolution.

Three classroom hours. *3 credits.*

***BIOLOGY 111b. Microbial Genetics**

Mutation, variation, adaptation and other aspects of genetics in bacteria, viruses and other microorganisms. Problems of nucleus-cytoplasm relationships. Population genetics.

Three classroom hours. *3 credits.*

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

***BIOLOGY 120b. Advanced Microbiology**

Enrichment and isolation of representative bacteria. Discussion of the biology of these forms.

Two classroom and four laboratory hours a week. *4 credits.*

Laboratory fee: \$15.

BIOLOGY 124a. Virology

Biology of plant, animal and bacterial viruses.

Three classroom hours. *3 credits.*

Mr. Epstein

BIOLOGY 131b. Experimental Morphogenesis

The fundamentals of embryology as exemplified by the chick, amphibian, and selected invertebrates. The classical experiments of embryology will be re-evaluated by application of modern techniques of tissue dissociation, tissue cultures, etc., as well as by the original approaches.

Three classroom hours; laboratory to be arranged. *4 credits.*

Laboratory fee: \$15.

Mr. Zwilling

BIOLOGY 141b. Physical Biology

Physical aspects of vision and hearing; properties of membranes and muscles; nerve excitation and conduction; forces involved in biological events; introduction to radiobiology; application of physical measurements to biology.

Three classroom hours. *3 credits.*

Mr. Epstein

Biology Colloquium

Presentations by staff members and guest lecturers on original investigations.

No credit

BIOLOGY 200b. Comparative Physiology

The physiological and biochemical distinctions among living organisms will be presented and the origins of these differences will be discussed from the viewpoint of biochemical evolution. An attempt will be made to define basic metabolic processes common to all organisms as well as the evolution of special pathways in certain groups.

Three classroom hours. *3 credits.*

Mr. Schiff

***BIOLOGY 212a. Cytogenetics**

Correlation of genetic data with chromosomal aberration. Study of classical methods and recent findings.

Prerequisites: Biology 102a and 103b.

Three classroom hours; laboratory to be arranged. *4 credits.*

Laboratory fee: \$10.

***BIOLOGY 214b. Experimental Methods in Microbial Genetics**

Introduction to the study of microbial variations, including spontaneous and induced mutations; recombination, transduction and other phenomena, using bacteria and bacterial viruses.

Laboratory hours to be arranged. *3 credits.*

Laboratory fee: \$20.

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

***BIOLOGY 222a. Microbial Metabolism**

Nutrition and intermediary metabolism or microorganisms.

Prerequisite: Biochemistry 100a or the equivalent.

Three classroom hours. *3 credits.*

***BIOLOGY 223b. Experimental Methods in Microbial Metabolism**

An introduction to specialized techniques as applied to the study of microbial metabolism, including manometry, chromatography, spectrophotometry, tracer techniques, etc.

Laboratory hours to be arranged. *3 credits.*

Laboratory fee: \$20.

BIOLOGY 245a. Selected Topics in Biophysics

Three classroom hours a week. *3 credits.*

Mr. Epstein

BIOLOGY 245b. Selected Topics in Developmental Biology

Three classroom hours a week. *3 credits.*

Mr. Zwilling

BIOLOGY 400. Research in Genetics and Microbiology

Laboratory hours to be arranged. Credits to be arranged.

Laboratory fee: \$25.

Mr. Epstein

BIOLOGY 401. Research in Genetics and Microbiology

Laboratory hours to be arranged. Credits to be arranged.

Laboratory fee: \$25.

Mr. Kelner

BIOLOGY 402. Research in Microbiology and Physiology

Laboratory hours to be arranged. Credits to be arranged.

Laboratory fee: \$25.

Mr. Klein

BIOLOGY 403. Research in Genetics and Cytology

Laboratory hours to be arranged. Credits to be arranged.

Laboratory fee: \$25.

Mrs. Schurin

BIOLOGY 404. Research in Physiology

Laboratory hours to be arranged. Credits to be arranged.

Laboratory fee: \$25.

Mr. Olsen

BIOLOGY 405. Research in Invertebrate Development

Laboratory hours to be arranged. Credits to be arranged.

Laboratory fee: \$25.

Mr. Fulton

BIOLOGY 406. Research in Plant Physiology

Laboratory hours to be arranged. Credits to be arranged.

Laboratory fee: \$25.

Mr. Schiff

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

BIOLOGY 407. Research in Invertebrate Zoology

Laboratory hours to be arranged. Credits to be arranged.

Laboratory fee: \$25.

Mr. St. John

BIOLOGY 408. Research in Differentiation and Genetics

Laboratory hours to be arranged. Credits to be arranged.

Laboratory fee: \$25.

Mr. Sussman

BIOLOGY 409. Research in Vertebrate Development

Laboratory hours to be arranged. Credits to be arranged.

Laboratory fee: \$25.

Mr. Zwilling

Biophysics

OBJECTIVES

The interdepartmental graduate program in Biophysics, leading to the degree of Doctor of Philosophy, is designed to give the student a broad understanding of the physico-chemical nature of living processes and to train him to carry out independent research. In addition to basic courses in cellular biology, the student will be expected to obtain a broad background in the supporting disciplines of biochemistry, biology, chemistry, physics, and mathematics. After completion of this program, the student's remaining course work will be in an area of Biophysics in which a faculty member is doing research. Some areas in which research is now being actively pursued are photobiology, radiobiology, virus reproduction, and muscle contraction.

ADMISSION

The general requirements for admission to the Graduate School, given in an earlier section of this catalog, apply to applicants for admission to this area of study. Applicants are also required to take the Graduate Record Examination. The student's undergraduate program should, ideally, include organic and physical chemistry, atomic and nuclear physics, differential equations, and courses in cellular biology. Inasmuch as most students will be deficient in some respects, it is expected that deficiencies may be made up by taking the appropriate courses while in Graduate School. If a petition is approved, the successful completion of some of these courses may be credited as part of the graduate program. On being admitted to study in Biophysics, the student will be assigned to a member of the Biophysics Committee who will advise the student on a program of courses. This program should be submitted for approval to the Committee by the beginning of the second term of residence.

FACULTY

Professor MARTIN D. KAMEN (Biochemistry), *Chairman*; Professors NATHAN O. KAPLAN (Biochemistry), HENRY LINSCHITZ (Chemistry); Associate Professors HERMAN T. EPSTEIN (Biophysics), *ALBERT KELNER (Biology), WILLIAM P. JENCKS (Biochemistry); Assistant Professors ROBERT E. KANE (Biochemistry), RICHARD S. MORGAN (Biochemistry), JOHN M. OLSON (Biochemistry and Physics).

DEGREE REQUIREMENTS

DOCTOR OF PHILOSOPHY

Program of Study—The following are five areas in which competency at more than a minimal level is expected of a candidate for a Ph.D. in Biophysics:

1. Biology—competency to include at least one area of biology in which the candidate could be presumed to be capable of doing independent work.
2. Modern physics through the basic ideas of quantum mechanics.
3. Physical chemistry including thermodynamics.
4. Biochemistry.
5. Mathematics through elementary differential equations.

* On Leave, 1960-1961.



First lady of the faculty . . .

discusses the United Nations

Vanguard of Wien Scholars . . .

arrives for summer briefing





Kutz Hall at dusk . . .

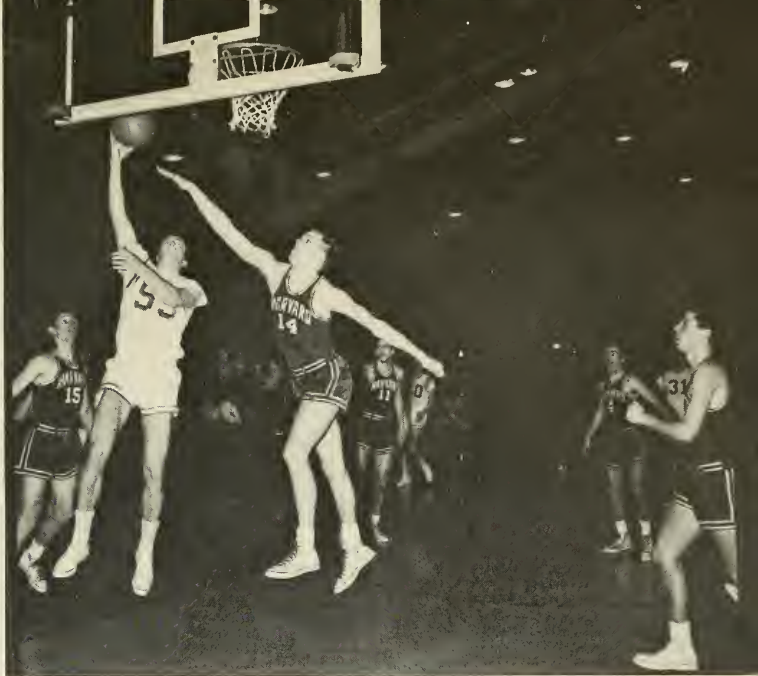
©Ezra Stoller

brightens North Quadrangle

Renfield and Usen Women's Residence Halls . . .

seen across Kane Reflecting Pool





Harvard meets the Judges . . .
on the Brandeis court

Swing your partner . . .
students relax after classes





Student Council . . .

regular meetings for advisory group

Informality and comfort . . .

features of reading rooms in Goldfarb Library Building



AREAS OF STUDY AND COURSES

This background would normally be acquired by taking a sufficient number of courses from the following list:

Biochemistry 100a, 101, 200a, 206b

Biology 30a (Principles of Genetics), 101b, 104b, 141b

Chemistry 140a, 145b, 147b

Mathematics 25b (Elementary Differential Equations)

Physics 32a (Mathematical Physics I), 41a and 41b (Modern Physics I and II), 102

Language Requirements—A reading knowledge of German and French is required. Russian may be substituted for one of these languages if the Advisory Committee determines that it is useful for a student in his particular field of research.

Qualifying Examination—A student should have completed the program of study not later than the end of his second year in residence so that he may be able to take a qualifying examination covering this material.

Dissertation and Defense—Upon passing this examination, the student will select a dissertation supervisor and formally initiate research and course study in the research area of his supervisor. An additional twelve credits are to be taken from among the courses listed above or from other graduate courses and seminars as approved by the student's Advisory Committee. This Committee will be appointed by the dissertation supervisor, subject to the approval of the Biophysics Committee. When the student and the dissertation supervisor have agreed on the research project, a brief description of the project must be filed with each of the members of the Advisory Committee.

After completing the research and the dissertation, the candidate will present and discuss the results and significance of his work during an examination in defense of his dissertation.

Chemistry

OBJECTIVES

The graduate program in Chemistry is designed to lead to a broad understanding of this subject. All students will be required to demonstrate knowledge in advanced modern areas of inorganic, organic and physical chemistry. They will be required also to demonstrate proficiency in selected experimental techniques which are used in chemical research. Advanced courses are offered, satisfactory completion of which will constitute partial fulfillment of these requirements. Members of the Chemistry staff are currently investigating mechanisms of organic reactions, chemistry of free radicals, stereochemistry, chemistry of organo-phosphorous compounds, chemotherapy, mechanism of enzyme reactions, structure of natural products, chemical kinetics of elementary reactions, statistical theory of atomic and molecular structure, properties of non-aqueous solutions, photochemistry, mechanism of photosynthesis, solid state chemistry, electron paramagnetic resonance.

To avoid excessive specialization, related advanced work in mathematics, physics, and biology may be offered to fulfill degree requirements.

ADMISSION

The general requirements for admission to the Graduate School, given in an earlier section of this catalog, apply to candidates for admission to this area of study. In addition, the undergraduate curriculum of applicants should include courses in physics and mathematics (differential and integral calculus), and courses in general, analytical, organic and physical chemistry.

Admission to advanced courses will be based upon results of a qualifying examination in each of these areas of chemistry, which will be taken upon entrance. These examinations will determine whether the student will be required to make up deficiencies in preparation. The qualifying examinations will be given twice a year; (1) during the two-week period ending with the first week of the Fall semester and (2) during the third week in February. The results of the qualifying examinations will be considered in the assignment of awards for the subsequent years of graduate study.

FACULTY

Professor SAUL G. COHEN, *Chairman*: Free-radical reactions. Stereochemistry. Reactions of enzymes.

Professor ORRIE M. FRIEDMAN: Chemistry of organo-phosphorus compounds. DNA. Enzymes and chemotherapeutic mechanisms. (*Graduate Student Adviser*)

Professor SIDNEY GOLDEN: Chemical kinetics of elementary reactions. Statistical theory of atomic and molecular structure.

Professor HENRY LINSCHITZ: Reactions of excited molecules. Luminescence. Mechanism of photosynthesis.

Associate Professor MYRON ROSENBLUM: Non-benzenoid aromatics and thermally induced rearrangements.

Associate Professor ROBERT STEVENSON: Chemistry of natural products, particularly steroids and terpenes.

Adjunct Associate Professor CHI-HUA WANG: Mechanism of free radical reactions.

AREAS OF STUDY AND COURSES

Assistant Professor PAUL B. DORAIN: Solid state chemistry and electron paramagnetic resonance.

Assistant Professor THOMAS R. TUTTLE, Jr.: Electron spin resonance and structure of free radicals.

DEGREE REQUIREMENTS

MASTER OF ARTS

Qualifying Examinations—The qualifying examinations must be passed by the end of the first year of graduate study.

Program of Study—Each candidate for the Master's degree is required to complete satisfactorily:

1. Not less than *eighteen semester hours of lecture course work* in inorganic, organic and physical chemistry. Graduate courses in related fields may be offered to fulfill the chemistry requirements on petition to the Department. The petition must be approved prior to registration for such courses.

2. *Six semester hours of advanced laboratory work*. This requirement may be met by graduate credit in laboratory work in courses numbered over 100.

Residence Requirement—The minimum residence requirement for this degree is one year. While generally this will be fulfilled in two semesters and one summer, it may in certain instances be met in two semesters.

Language Requirements—A reading knowledge of German and an elementary knowledge of French or Russian is required.

DOCTOR OF PHILOSOPHY

Program of Study—Each candidate for the Doctor's degree is required to complete satisfactorily:

1. The qualifying examinations which must be passed at a level satisfactory for this degree by the end of the first year of graduate study.

2. The program of study described for the degree of Master of Arts in Chemistry, or its equivalent.

3. Not less than nine additional semester hours of lecture course work in Chemistry selected from those in the 200 series.

4. Final examinations. After the student has been admitted to the Ph.D. program, normally in the second year of graduate study, he begins to take final written examinations in his major field, organic or physical chemistry. These are administered twice a year, at the end of each semester, and are based on assigned readings. Students must pass three of these examinations and must maintain satisfactory progress toward this end.

Residence Requirements—The minimum residence requirement for this degree is two years. Ordinarily, three years of full-time study will be necessary for the completion of the course work and the preparation of an acceptable thesis.

Language Requirements—A reading knowledge of German and either French or Russian is required.

Admission to Candidacy—The student may be recommended for admission to candidacy upon the recommendation of his dissertation adviser, and the completion of the following requirements: the qualifying examinations, twenty-one hours of graduate lecture course credit, the language examinations and one final examination.

AREAS OF STUDY AND COURSES

Dissertation and Defense—A thesis is required which summarizes the results of an original investigation and which demonstrates the competence of the candidate in independent investigation, critical ability, and effectiveness of expression. The topic of the thesis must receive approval of the Department. An oral defense of the dissertation will be held.

Courses of Instruction

CHEMISTRY 121b. Advanced Inorganic Chemistry

Atomic structure, theory of valence, coordination complexes and inorganic stereochemistry.

Three classroom hours a week.

Mr. Dorain

CHEMISTRY 130a. Qualitative Organic Analysis

Experience in the systematic analysis of functional groups and the elucidation of structure of organic chemical substances by various techniques that include the use of spectrophotometric analysis.

One lecture and two three-hour laboratory periods per week.

Laboratory fee: \$10.

Mr. Wang

CHEMISTRY 131a. Advanced Organic Chemistry

Stereochemistry, electronic theory, molecular rearrangements, mechanisms of organic reactions.

Three classroom hours a week.

Mr. Cohen

CHEMISTRY 131b. Advanced Organic Chemistry

Continuation of Chemistry 131a.

Prerequisite: Satisfactory grade in Chemistry 131a.

Three classroom hours a week.

Mr. Cohen

CHEMISTRY 140a. Chemical Thermodynamics

Fundamental principles of thermodynamics and application to chemical problems.

Mr. Linschitz

CHEMISTRY 145b. Chemical Kinetics

Kinetics of homogeneous and heterogeneous chemical change.

Three classroom hours a week.

To be announced

CHEMISTRY 147b. Elementary Quantum Mechanics

Wave properties, matter waves, Schrodinger's equation; operators and observables, wave-functions and eigenvalue problems; stationary states of simple systems, energy spectrum and dispersion relations; potential barriers; perturbation theory.

Mr. Tuttle

CHEMISTRY 200. Advanced Chemistry Laboratory

Staff

CHEMISTRY 231c. Selected Topics in Organic Chemistry

Required of graduate students in Organic Chemistry who must audit this course each year and may receive three credits after participating for two years and presenting two seminar talks.

Staff

AREAS OF STUDY AND COURSES

CHEMISTRY 234b. Topics in Advanced Organic Chemistry

Synthetic methods of organic chemistry and their application in the chemistry of natural products.

Prerequisite: Satisfactory grades in Chemistry 131a and 131b, or the equivalent.
Mr. Friedman

CHEMISTRY 235a. The Chemistry of Natural Products

The structure, elucidation, synthesis and degradation of selected classes of natural products.

Prerequisite: Satisfactory grades in Chemistry 131a and 131b, or the equivalent.
Mr. Stevenson

CHEMISTRY 241c. Selected Topics in Physical Chemistry

A seminar course.

Prerequisite: Satisfactory grades in Chemistry 140a and 121a, or 145b, or the equivalent.
Staff

CHEMISTRY 243b. Statistical Thermodynamics

Elementary statistical mechanics of systems in equilibrium; Boltzmann, Fermi-Dirac and Bose-Einstein statistics; microcanonical, canonical and grand canonical ensembles; applications to thermodynamic systems.
Mr. Golden

CHEMISTRY 247b. Quantum Mechanics

Atomic and molecular structure.

Prerequisite: Satisfactory grade in Chemistry 147a or the equivalent.
To be announced

Chemistry Colloquium

Lectures by faculty and graduate students. Required of all graduate students.
No credit.

Courses in Research

CHEMISTRY 400.	Organic Chemistry	<i>Mr. Cohen</i>
CHEMISTRY 401.	Organic Chemistry	<i>Mr. Stevenson</i>
CHEMISTRY 402.	Organic Chemistry	<i>Mr. Friedman</i>
CHEMISTRY 403.	Organic Chemistry	<i>Mr. Rosenblum</i>
CHEMISTRY 404.	Organic Chemistry	<i>Mr. Wang</i>
CHEMISTRY 405.	Physical Chemistry	<i>Mr. Golden</i>
CHEMISTRY 406.	Physical Chemistry	<i>Mr. Linschitz</i>
CHEMISTRY 407.	Physical and Inorganic Chemistry	<i>Mr. Dorain</i>
CHEMISTRY 408.	Physical Chemistry	<i>Mr. Tuttle</i>

AREAS OF STUDY AND COURSES

English and American Literature

OBJECTIVES

The graduate program in English and American Literature is designed to offer training in the interpretation and evaluation of literary texts with some attention to the related scholarly disciplines, particularly history and linguistics. It also offers for candidates who have some ability in writing an opportunity to pursue this interest as a normal part of the graduate program.

ADMISSION

Candidates for admission should have a Bachelor's degree, preferably with a major in English and American literature, and a reading knowledge of French, or German, or Greek and Latin. The general requirements for admission to the Graduate School, as specified in an earlier section of this catalog, apply to candidates for admission to this area of study.

FACULTY

Professor IRVING HOWE, *Chairman*: American literature. The novel.

Visiting Professor ALFRED ALVAREZ: Modern poetry. British literature.

Professor JAMES V. CUNNINGHAM: Renaissance literature. Creative writing.

Visiting Professor IRVIN EHRENPREIS: Eighteenth century literature.

Professor OSBORNE EARLE: Old English. Milton.

Professor LOUIS KRONENBERGER: Restoration comedy. Modern comedy.

Professor EDWIN BURR PETTET: Dramatic criticism.

* Professor PHILIP RAHV: American literature. Criticism.

Associate Professor MILTON HINDUS: American literature.

Associate Professor JOHN F. MATTHEWS: American drama.

Associate Professor ROBERT OTTO PREYER: Victorian literature.

Assistant Professor ROBERT EVANS: Linguistics. Chaucer. Creative writing.

Assistant Professor HARVEY D. GOLDSTEIN: Seventeenth and eighteenth century literature.

Dr. JOHN BURT WIGHT: Teacher training.

DEGREE REQUIREMENTS

MASTER OF ARTS

Program of Study—The program of study in the first year of graduate work leading to the degree of Master of Arts will consist of six half-courses (three a semester), and the required independent reading course in major texts of English and American Literature. The six half-courses will normally include Introduction to Literary Study; at least one seminar a semester; Old English, or History and Structure of the English Language; and may include a half-course in advanced writing. Candidates who are deficient in training, however, will in most cases need additional course work to fulfill the requirements for the degree of Master of Arts. Two Master's papers of acceptable quality in two seminars will also be required.

Residence Requirement—The minimum residence requirement is one year, though students with inadequate preparation may require more.

* On Leave, 1960-1961.

AREAS OF STUDY AND COURSES

Language Requirements—Each candidate must have a reading knowledge of French, or German, or Greek and Latin.

Qualifying Examinations—Each candidate must pass the written and oral examinations in English 299.

DOCTOR OF PHILOSOPHY

Program of Study—The program of study in the second year of graduate work leading to the degree of Doctor of Philosophy will consist of six half-courses. These will normally include three or four seminars, the English Seminar, and may include a half-course in advanced writing. The program in the third year of doctoral study will normally be devoted to preparation for the qualifying examinations and for the dissertation examination. Candidates who are deficient in training, however, may require more formal course work. Requirements for the Master of Arts in English must be completed and the examinations for this degree must be passed at a high level.

Language Requirements—Each candidate must have a reading knowledge of two of the following languages: Greek, Latin, French, Italian, German.

Residence Requirement—The minimum residence requirement is one year beyond the Master's degree or two years beyond the Bachelor's, but candidates will normally take three or four years.

Qualifying Examinations—Each candidate must pass examinations in four fields of English and American Literature. Normally one of these fields will be closely related to the topic of his thesis; one may be a major text, for example, *Paradise Lost*; and the other two will be on fields in which his formal training has been deficient. The examinations will be based on reading lists submitted by the candidate and approved by his Committee; the lists should represent the minimum preparation for teaching an undergraduate course on the subject. These examinations may be taken at one time, or in groups of two at two separate times.

Dissertation and Defense—When the candidate has chosen and explored a topic for his thesis he must petition the Department for a formal conference. This is the dissertation examination; in it the proposed topic, the proposed methods, and the candidate's preparation and his ability to deal with the topic will be discussed. The decisions and stipulations of the Department will be recorded and put on file.

Finally, the candidate must submit an acceptable monograph or some comparable contribution to learning, on a topic and in a form approved by the Committee at his dissertation examination.

Courses of Instruction

In addition to the following courses, graduate students in English and American Literature, with the permission of the Chairman of the Department, may take for credit any Humanities and Comparative Literature courses in the 100 series. For description of such courses refer to the undergraduate catalog.

ENGLISH 100a or b. Comprehensive Examination

An examination on the ability to interpret and evaluate literary works, given in December and April. The list of works will be announced at the beginning of each semester.

Staff

AREAS OF STUDY AND COURSES

ENGLISH 105a. Seminar in Pope and Johnson *Mr. Goldstein*

ENGLISH 107a. Seminar in Victorian Poetry *Mr. Preyer*

ENGLISH 108b. Seminar in Whitman and Dickinson *Mr. Hindus*

ENGLISH 121. Old English

An introduction to Old English grammar, with special attention to the rapid attainment of skill in reading. Texts of prose and the shorter poems will be read in the first semester; *Beowulf* in the second semester. *Mr. Earle*

ENGLISH 132b. Dramatic Criticism

A study of dramatic criticism from Aristotle to the present. An investigation into the development of the dramatic arts as seen through the records of critical observers. *Mr. Pettet*

ENGLISH 147b. Milton

The reading will include *Comus* and the minor poems, *Paradise Lost*, *Paradise Regained*, *Samson Agonistes*, as well as selections from the prose writings. *Mr. Earle*

ENGLISH 155a. Restoration Comedy

A study of classic English comedy, chiefly of the Restoration dramatists—Etherege, Wycherley, Dryden, Congreve, Vanbrugh. The course will open with the great Restoration ancestor, Ben Jonson, and continue into the eighteenth century to Goldsmith and Sheridan.

Term paper required.

Two classroom hours per week.

Mr. Kronenberger

ENGLISH 160a. Studies in American Literature

The course will deal with a number of the more influential American men of letters—poets and critics—of the twentieth century: T. S. Eliot, Robert Frost, and Irving Babbitt among others. *Mr. Hindus*

ENGLISH 162a. Modern British Poetry

A study of some of the main British poets of the twentieth century, including Yeats, Eliot, Lawrence, Auden, Graves, and others. *Mr. Alvarez*

ENGLISH 176b. Modern Comedy

A consideration of comedy, in the wide sense, since its rebirth in the late nineteenth century. There will be particular emphasis on Shaw and Chekhov, and treatment of such playwrights as Wilde, Synge, O'Casey, Pirandello, Molnar, Maugham, George Kelly, S. N. Behrman, T. S. Eliot and Christopher Fry.

Term paper required.

Two classroom hours per week.

Mr. Kronenberger

ENGLISH 181b. Henry James

A close study of the novels of Henry James. *Mr. Howe*

***ENGLISH 182b. From James to Faulkner**

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

ENGLISH 188a. History of the American Drama

A study of the American theatre from its beginnings to the First World War.
Mr. Matthews

ENGLISH 188b. History of the American Drama

A study of the American theatre from the First World War to the present.
Mr. Matthews

ENGLISH 192b. History and Structure of the English Language

A study of the linguistic structure of modern English and of the historical processes through which it developed.

Required of graduate students in the first year. *Mr. Evans*

ENGLISH 201a. Introduction to Literary Study: Shakespeare

Required of graduate students in the first year. *Mr. Cunningham*

ENGLISH 213a. Seminar in Poetry

The School of Donne. Master's paper. *Mr. Alvarez*

ENGLISH 214a. Seminar in the Middle Ages

Chaucer's *Canterbury Tales*. Master's paper. *Mr. Evans*

ENGLISH 215b. Seminar in the Renaissance

The literary situation in the 1590's. Master's paper. *Mr. Cunningham*

ENGLISH 216b. Seminar in the Seventeenth Century

The Age of Dryden. Master's paper. *Mr. Goldstein*

ENGLISH 217b. Seminar in the Eighteenth Century

Jonathan Swift. Master's paper. *Mr. Ehrenpreis*

ENGLISH 218b. Seminar in the Nineteenth Century

George Eliot's novels. Master's paper. *Mr. Preyer*

ENGLISH 219a. Seminar in American Literature

American fiction between the Civil War and World War I. Master's paper.
Mr. Howe

ENGLISH 299. Major Texts of English and American Literature

Independent reading of a number of major texts, distributed over the various kinds and periods of English and American literature, with an oral and written examination at the end of the year. This examination, which will consist solely in the interpretation and evaluation of the texts on the reading list, will constitute the examination for the Master's degree, and will serve also as a qualifying examination for the doctorate.

Students preparing for this examination will meet every other week for informal discussion of the texts under the guidance of a member of the faculty. *Staff*

AREAS OF STUDY AND COURSES

ENGLISH 301b. The English Seminar

Each member of the seminar will present a public lecture embodying the results of independent investigation.

Required of all graduate students in the second year.

Mr. Preyer

ENGLISH 311. Seminar in Teaching

Required of all graduate students who are engaged in classroom instruction. No credit.

Mr. Wight

ENGLISH 400. Research

Candidates for the Doctor's degree who are in residence and who have completed the formal requirements for admission to candidacy, will register under this number.

Staff

ENGLISH COMPOSITION 101a and b. Directed Writing

Exercises principally in the sketch and the short story.

Limited enrollment. One two-hour meeting a week.

Fall Term: *Mr. Evans*

Spring Term: *Mr. Cunningham*

ENGLISH COMPOSITION 102a. The Writing of Poetry

Prerequisite: Consent of the instructor.

Mr. Cunningham

***ENGLISH COMPOSITION 201a. Advanced Exposition**

A conference course designed to assist graduate students in all areas in the preparation of reports and theses.

* Not to be given in 1960-61.

History of Ideas

OBJECTIVES

The purpose of the program in the History of Ideas is to train graduate students in the intellectual history of the western world within the larger setting of political, economic, and social history. The program aims to escape from restrictive specialization, to concentrate on the foundation of our traditions, and to penetrate behind the political, socio-economic, and cultural data to the forces which shape and flow from them. It thus aspires to synthesize the network of relationships forming a given historical period, and in so doing, to help the future teacher to participate in courses in western civilization or culture, general education, or intellectual history. The program for the Ph.D. aims further to train the advanced student in research in intellectual history and to promote his own independent and creative study.

ADMISSION

In addition to the general requirements for admission to the Graduate School, the applicant should present an undergraduate major in history, philosophy, politics or sociology, or the equivalent.

FACULTY

Executive Committee: Professors HERBERT MARCUSE, *Chairman*; **LEWIS A. COSER, NAHUM N. GLATZER, EDGAR N. JOHNSON, JOHN P. ROCHE.

Staff: Professors ALEXANDER ALTMANN, DAVID S. BERKOWITZ, **LEWIS A. COSER, NAHUM N. GLATZER, EDGAR N. JOHNSON, FRANK E. MANUEL, HERBERT MARCUSE, JOHN P. ROCHE, KURT H. WOLFF; Associate Professor **GEORGE FISCHER; Assistant Professor HEINZ M. LUBASZ; Dr. HARALD A. T. REICHE, Mr. JEROME COHEN.

DEGREE REQUIREMENTS

MASTER OF ARTS

Program of Study—The program for the M.A. must be completed in two years or less. A minimum program will consist of four six-credit courses, or the equivalent, to be reasonably distributed over the ancient, medieval, early, and late modern periods in the following fields:

General Intellectual History
History of Philosophy
History of Political and Social Thought
History of Religious Thought

Students with an inadequate background in general history may be required to register in certain preparatory courses of the 100 group before being admitted to advanced seminars. It is assumed that by the time a student is ready for his qualifying examination for the M.A. he will have taken approximately one half of his courses in seminars.

Language Requirement—The candidate must pass a reading examination in French or German before the end of his first term.

Qualifying Examination—To qualify for the M.A. the candidate must pass an oral or written examination. He will be examined in one field of his choice, *i.e.*,

** On Leave, Spring Term, 1960-1961.

AREAS OF STUDY AND COURSES

(1) General Intellectual History, (2) History of Philosophy, (3) History of Political and Social Thought, or, (4) History of Religious Thought, for three of the four periods in the history of the western world, *i.e.*, ancient, medieval, early and late modern. At present this examination is also a qualifying examination for admission to the program for the Ph.D.

DOCTOR OF PHILOSOPHY

Candidate for the Ph.D. with an M.A. from another university may be required to pass a preliminary examination similar to that for the M.A. at Brandeis in the History of Ideas.

Program of Study—A candidate for the Ph.D. must complete at least two years of residence, *i.e.* at least forty-eight hours of credit in courses. His program will consist of specialized seminars and independent reading and research in the areas and periods of his choice.

Language Requirements—The candidate must have passed a reading examination in both French and German within two terms after taking his M.A.

Admission to Candidacy—Once his work for the M.A. is completed, the student will be admitted to candidacy for the doctorate when the subject of his dissertation has been approved and his language examinations passed.

Dissertation and Final Oral Examination—The dissertation must be approved by a Committee of readers appointed by the Chairman of the Committee in the History of Ideas. After such approval, the candidate must pass a final oral examination in defense of the dissertation.

Courses of Instruction

HISTORY OF IDEAS 101a. Intellectual History of Greece

The course will be conducted by lectures and by discussions of selected texts. Topics such as the following will be considered: The nature of Greek mythology. The rise of rational thought among the Pre-Socratic philosophers. Periclean drama and historiography. The rivalry of philosophy and rhetoric in the fourth century. The schools of philosophy in the Hellenistic Age.

Mr. Reiche

HISTORY OF IDEAS 110a. Sociology of Knowledge

History and the historical interpretation of the sociology of knowledge with particular emphasis on German and recent American literature.

Prerequisite: Permission of the instructor.

Mr. Wolff

HISTORY OF IDEAS 116a. The Book of Job and the Problem of Evil

See NEJS 116a.

Mr. Glatzer

HISTORY OF IDEAS 121. History of Social and Political Ideas in Antiquity and the Middle Ages

An advanced course presenting intensive textual analyses of the major political documents of Plato, Aristotle and the Stoics, Christian conception of society, church authority and the church-state relations in the Roman Empire. Medieval patterns of reconstruction and conflict from Augustine to the rise of the dynastic state.

Mr. Berkowitz

***HISTORY OF IDEAS 123b. The Transition from the Late Roman to the Early Medieval World**

A study of the decline of ancient civilization. Reading and discussion of pertinent documents together with lectures, reports and papers on dominant figures and ideas. The emphasis will be on the Western Empire.

HISTORY OF IDEAS 128. The Renaissance and Reformation in Europe

Lectures, readings and reports on selected topics dealing with the new currents in literature, scholarship, art, political theory, and religion. *Mr. Berkowitz*

***HISTORY OF IDEAS 129a. The Renaissance and Reformation in Sixteenth Century England**

The development of institutions and outlooks in sixteenth century England under the impact of Renaissance and Reformation currents.

***HISTORY OF IDEAS 130b. Topics in the Constitutional History of Seventeenth Century England**

The intellectual and institutional background of the constitutional crisis and the development of related political theories in seventeenth century England; the nature of law and authority, the Crown in Parliament, the royal prerogative and parliamentary sovereignty, liberties of the subject, religious toleration.

HISTORY OF IDEAS 131. Main Currents in Modern European Thought

A study of main currents in European thought since the end of the seventeenth century as revealed in the writings of men who profoundly influenced the ideas and sentiments of the modern world. Emphasis will be placed on the great thinkers who formulated a moral outlook for their age. Lectures and the reading of selected texts. *Mr. Manuel*

***HISTORY OF IDEAS 132b. Philosophies of History from Vico through the Present**

A study of central themes in European philosophy of history in modern times. Lectures and the reading of selected texts.

HISTORY OF IDEAS 133a. Intellectual History of Europe: 1870-1939

European thought in its social and political context, with special attention to Germany. Lectures and reading of selected texts. *Mr. Lubasz*

HISTORY OF IDEAS 133b. Intellectual History of Europe: 1870-1939

Continuation of History of Ideas 133a.

Mr. Lubasz

HISTORY OF IDEAS 163. American Intellectual History

The history of ideas in America from the seventeenth century to the present. The course traces the evolution of the major traditions through the writings of significant figures and in relationship to significant historical events. *Mr. Cohen*

HISTORY OF IDEAS 170a. American Political Thought and Institutions

An examination of the origins of American political thought and the beginnings of American institutions covering the period prior to the Civil War; the

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

emphasis will be on the relationships between ideas and actions, between theory and institutions. *Mr. Roche*

HISTORY OF IDEAS 195. Political Theory

The development of political thought from antiquity to the nineteenth century, discussed in relation to the development of Western society and culture.

Prerequisite: Permission of the instructor.

Mr. Marcuse

***HISTORY OF IDEAS 205b. Political Ideas of Plato, Aristotle and St. Augustine**

Intensive analysis of major texts dealing with basic conceptions of political and social philosophy and related developments in ideas and institutions.

***HISTORY OF IDEAS 208a. Studies in Eschatological Theories**

For description see NEJS 258a.

HISTORY OF IDEAS 217a. The Thought of the Latin Fathers of the Church

Readings, discussions and seminar reports and papers on the thought and careers of Saints Jerome, Ambrose, Augustine and Gregory the Great. *Mr. Johnson*

***HISTORY OF IDEAS 218a. Intellectual History of the Twelfth and Thirteenth Centuries**

Readings, reports, and seminar papers on selected topics related to the various aspects of the medieval revival.

HISTORY OF IDEAS 226a. Problems in Sixteenth Century Political Theory

Research seminar requiring a finished scholarly report.

Mr. Berkowitz

HISTORY OF IDEAS 229b. Problems in the Intellectual History of England in the Seventeenth Century

Graduate seminar requiring a finished scholarly report. Topics may be selected dealing with political theory, constitutional thought, and certain aspects of theology and philosophy.

Mr. Berkowitz

***HISTORY OF IDEAS 232. The Age of Enlightenment**

Selected problems. A reading knowledge of either French or German is required.

HISTORY OF IDEAS 233. Social Thought in the Nineteenth Century

Selected problems. A reading knowledge of French or German is required.

Mr. Manuel

***HISTORY OF IDEAS 241. French Political Thought in the Nineteenth Century**

A systematic discussion of the main political theories in nineteenth century France. Counter-revolutionary thought; trends in French liberalism; the main French Socialist thinkers.

***HISTORY OF IDEAS 242b. The Development of German Sociological Thought from 1880 to 1914**

The course will center upon the sociological work of Max Weber and Georg Simmel, but will also consider parallel themes as developed by Dilthey, Tonnies, Sombart, and Troeltsch.

* Not to be given in 1960-61.

HISTORY OF IDEAS 243b. Russian Political Thought

Research seminar in modern Russian thought. Russian not required. *Mr. Fischer*

HISTORY OF IDEAS 244a. Problems in the History of Ancient Philosophy

Discussion of some of the foundational concepts of philosophy as Being, Reason, Freedom, Idea. *Mr. Marcuse*

HISTORY OF IDEAS 244b. Problems in the History of Esthetics

Discussion will focus on the cognitive function of art and its relation to philosophy and politics. *Mr. Marcuse*

HISTORY OF IDEAS 300. Readings in the History of Ideas

Students will register with the individual instructor.

Mr. Reiche—ancient period;

Mr. Altmann and Mr. Johnson—medieval period;

Mr. Berkowitz—early modern period;

Mr. Manuel—late modern period;

Messrs. Roche, Marcuse and Berkowitz—history of political thought;

Mr. Marcuse—history of philosophy;

Mr. Coser—history of social thought;

Mr. Glatzer—history of religious thought;

Mr. Fischer—history of Russian thought.

HISTORY OF IDEAS 400. Doctoral Research

Staff

Mathematics

OBJECTIVES

The graduate program in Mathematics is designed primarily to lead to the Doctor of Philosophy degree. The formal course work is devoted to giving the student a broad foundation for work in modern pure Mathematics. An essential part of the program consists of seminars on a large variety of topics of current interest in which mathematicians from Greater Boston often participate. In addition, the Brandeis-Harvard-M.I.T. Mathematics Colloquium gives the student an opportunity to hear the current work of eminent mathematicians from all over the world.

ADMISSION

The general requirements for admission to graduate work in Mathematics are the same as those for the Graduate School as a whole. The Department has available a variety of fellowships and scholarships for well qualified students. To be considered for such financial support the student should submit application by February 1, 1961.

FACULTY

Associate Professor MAURICE AUSLANDER, *Chairman*: Homological Algebra
Visiting Professor LEOPOLDO NACHBIN: Functional Analysis and Differential Equations

*Professor ARNOLD S. SHAPIRO: Topology and Differential Geometry

*Associate Professor DAVID A. BUCHSBAUM: Homological Algebra

*Associate Professor OSCAR GOLDMAN: Algebra and Algebraic Number Theory

Assistant Professor EDGAR H. BROWN, JR.: Topology and Algebraic Topology

Assistant Professor WILLIAM L. HOYT: Algebraic Geometry

Assistant Professor JOSEPH J. KOHN: Analysis and Differential Geometry

Assistant Professor RAY A. KUNZE: Analysis

Assistant Professor HAROLD I. LEVINE: Differential Topology

Assistant Professor RICHARD S. PALAIS: Differential Topology

Assistant Professor DOCK SANG RIM: Homological Algebra

Dr. HEISUKE HIRONAKA: Algebraic Geometry

Dr. HOWARD STEIN: Lie Groups and Topology

DEGREE REQUIREMENTS

MASTER OF ARTS

1. One year's residence as a full-time student.
2. Successful completion of an approved schedule of courses.
3. Satisfactory performance on the General Examination which is normally taken by all degree students at the beginning of their second year.
4. Proficiency in reading French or German.

* On Leave, 1960-1961.

AREAS OF STUDY AND COURSES

DOCTOR OF PHILOSOPHY

1. Residence as a full-time student for two years.
2. Successful completion of an approved schedule of courses.
3. Superior performance on the General Examination.
4. Doctoral dissertation approved by the Department.
5. Final examination consisting of the defense of dissertation.
6. Proficiency in reading both French *and* German.

PROGRAM OF STUDY

Each student will be assigned an adviser who will approve the individual's program of study. The normal first year of study consists of Mathematics 101, 111, and 121. Students are expected to attend seminars of their choice in addition to Mathematics 199 which is required. The General Examination, which is usually taken at the beginning of the second year of study, will be based on the preceding work.

The first year's work should be followed by Mathematics 201, 211a and 221. After the second year, advanced courses, seminars and readings are offered, and the student should be prepared to start work on a dissertation.

Courses of Instruction

MATHEMATICS 101. Modern Algebra

Groups, rings, fields, Galois theory, representations and modules. *Mr. Auslander*

MATHEMATICS 111. Fundamental Analysis

Fundamental existence theorems for several real variables, manifolds and Riemann surfaces. *Mr. Palais*

MATHEMATICS 121. Topology I.

Set theory, topological spaces, function spaces and covering spaces. *Mr. Stein*

MATHEMATICS 140. Functions of a Complex Variable

Introduction to the use of complex functions in analysis and its applications. *Mr. Kunze*

MATHEMATICS 199. Problem Seminar

A seminar required of all first year graduate students. *Staff*

MATHEMATICS 201. Algebra II.

Function fields and commutative rings. *Mr. Hoyt*

MATHEMATICS 211a. Functional Analysis

Banach and Hilbert spaces. *Mr. Kohn*

MATHEMATICS 212b. Harmonic Analysis

Topological groups and Fourier series. *Mr. Kohn*

MATHEMATICS 221. Algebraic Topology

Sheaves, homology theory, and homotopy theory. *Mr. Brown*

AREAS OF STUDY AND COURSES

***MATHEMATICS 230. Homological Algebra**

***MATHEMATICS 250. Algebraic Geometry**

MATHEMATICS 290. Seminar in Algebra *Mr. Auslander and Staff*

MATHEMATICS 291. Seminar in Analysis *Messrs. Kohn and Kunze*

MATHEMATICS 292. Seminar in Topology *Messrs. Brown, Palais, and Stein*

MATHEMATICS 298. Readings in Mathematics *Staff*

MATHEMATICS 400. Doctoral Dissertation *Staff*

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

Mediterranean Studies

OBJECTIVES

The graduate program in Mediterranean Studies aims at inducting the student into the investigation of major problems involving the meeting of different peoples in and around the Mediterranean Sea, where Western civilization was first created and then developed. The instruction will train the student to master the primary sources as he learns the broad synthesis. Master of Arts as well as Doctor of Philosophy candidates are expected to show a grasp of the problem as a whole, as well as the ability to work in a variety of different sources. Doctor of Philosophy candidates will be required to demonstrate also a capacity for original research.

The scope of the Department embraces Mediterranean developments throughout Antiquity, the Middle Ages, and Modern Times. During 1959-1960, the Department concentrated on the first period during which the Asiatic and Greek forces met, laying much of the foundation for Western Culture. Cuneiform and Egyptian courses will continue these studies during 1960-1961.

In 1960-1961 the graduate program in Mediterranean Studies will emphasize the intermediate period between Alexander and Mohammed and the Islamic Age. A comparative study will be made of the teachings of Epictetus, the Coptic Fathers and the Jewish Fathers. An intensive program in the Arabic language and Islamic civilization will also be offered.

All courses will involve two or more interrelated sources. While it is desirable for the student to know as many of the sources as possible in advance, no student is expected to come ideally equipped with complete linguistic preparation. If a course requires the use of a source that the student has not already studied, he will ordinarily be permitted to enroll, provided that he is concurrently taking a basic language course to make up the deficiency.

While texts are the points of departure in all courses in this Department, class discussion will draw also on archeological materials and revolve about historic problems.

ADMISSION

The general requirements for admission to the Graduate School, given in an earlier section of this catalog, apply to candidates for admission to this area.

Students planning to enter this Department should take as much Hebrew, Greek and Latin as possible during their undergraduate course of study.

FACULTY

Professor CYRUS H. GORDON, *Chairman*: Cuneiform, Egypto-Semitic, and East Mediterranean Studies.

Assistant Professor FAWZI F. GADALLAH: Egyptology and Arabic Studies.

Assistant Professor DWIGHT WAYNE YOUNG: Egypto-Semitic and Cuneiform Studies.

DEGREE REQUIREMENTS

MASTER OF ARTS

Program of Study.—Each candidate for the Master's degree is required to com-

AREAS OF STUDY AND COURSES

plete satisfactorily not less than twenty-four semester hours of course work in the Department, plus any courses outside the Department that the major professor may prescribe. The candidate must also show a command of either Latin or Greek, and of Hebrew or Arabic, plus at least one other Oriental language (such as Akkadian, Ugaritic, or Egyptian).

Language Requirement—A reading knowledge of one modern foreign language (ordinarily French or German) is required.

Qualifying Examinations—The student must demonstrate, in written and oral examinations, proficiency in the sources of two major areas of the program and an ability to synthesize them. A broad grasp of the Mediterranean origins of Western Civilization will be required of all candidates, beyond the specific topics covered in courses.

DOCTOR OF PHILOSOPHY

The requirements are the same as for the Master of Arts degree, plus twenty-four additional semester hours of course work in the Department, a reading knowledge of two modern foreign languages (ordinarily French and German), and a doctoral dissertation.

Admission to Candidacy—A student shall be eligible for admission to candidacy upon completing his language requirements and satisfactorily passing his written and oral examinations. Proficiency in those examinations must be demonstrated in three major areas of the program; *e.g.*, Assyrian, Greek, and Hebrew (texts and history), or Egyptian, Ugaritic, and Arabic.

Dissertation and Defense—The dissertation should be a significant and original contribution to scholarship and should demonstrate a capacity for independent research based on primary sources. After submission of the dissertation, the candidate will be expected to defend it in a final oral examination.

Courses of Instruction

***MEDITERRANEAN STUDIES 105. Akkadian**

Studies in Akkadian grammar. Introduction to the Sumero-Akkadian script. Reading and critical analysis of various types of texts.

***MEDITERRANEAN STUDIES 106. Egyptian**

The Shipwrecked Sailor, *The Romance of Sinuhe*, and *The Journey of Wenamon* will be read with a view to delineating the Egyptian contribution to East Mediterranean literature. Selected historical and religious texts from the New Kingdom will also be studied. The course will include an investigation of linguistic problems with special reference to Biblical Hebrew.

MEDITERRANEAN STUDIES 107. Literary Texts of New Kingdom Date

The Ugaritic epics of Kret and Aqhat will be read in cuneiform script along with selected Late Egyptian stories in hieroglyphic copies. This material will serve as a basis for investigating the development of early Greek and Hebrew literatures.

Mr. Young

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

***MEDITERRANEAN STUDIES 108. Ugaritic**

An introduction to the Ugaritic language and literature. Reading of Ugaritic epics and myths; analysis of their influence on the poetry and prose of the Bible.

***MEDITERRANEAN STUDIES 109. Akkadian Documents from the Amarna Age**

Texts from Nuzu, Ugarit, Alalakh, and Tell el-Amarna will be analyzed. Constant attention will be given to the bearing of the material on biblical problems.

MEDITERRANEAN STUDIES 110. Assyrian Royal Inscriptions

Philological and historical analysis of cuneiform selections which recount exploits in Canaan. Problems in Akkadian grammar will be discussed. The relation of the assignments to problems in the Hebrew Bible will be stressed. *Mr. Young*

***MEDITERRANEAN STUDIES 112. The Achaemenian Age**

Herodotus' account of the Persians (including the invasions of the West by Darius I and Xerxes I) will be studied together with the Biblical Books of the Persian Period (especially Ezra, Nehemiah and Esther). Use will also be made of the Old Persian, Babylonian and Aramaic inscriptions of the Period.

***MEDITERRANEAN STUDIES 201. The Cuneiform Records of Anatolia and Adjacent Areas**

Hittite, Ugaritic and selected Akkadian tablets will be read with a view to investigating the transmission and development of culture around the East Mediterranean during the Amarna and Mycenaean Periods. The purpose of the course is to delineate the backdrop of classical Hebrew and Greek civilizations.

***MEDITERRANEAN STUDIES 202. The Amarna Age Synthesis**

The class will read a variety of ancient texts that will serve as a springboard for delineating the origins of western culture. The emphasis will be on Ugaritic poems that bridge specific segments of early Hebrew and Greek literatures.

MEDITERRANEAN STUDIES 203. Ethical Ideals in the Greco-Roman World

A comparative study of Epictetus (in Greek), the Anecdotes of the Egyptian Fathers (in Coptic), and the Ethics of the Fathers (in Hebrew).

Prerequisite: A knowledge of Greek and Hebrew.

Mr. Gordon

MEDITERRANEAN STUDIES 220. The Islamic Age

The transformation of the Mediterranean as a result of the Islamic Conquest. An institutional history of the Arab World, focusing on the Levant, with a view to providing background for understanding current problems in the area. *Staff*

MEDITERRANEAN STUDIES 221. Colloquial Levantine Arabic

A workshop aimed at enabling the student to understand the principal dialects and to speak a standard colloquial Arabic intelligible over a maximum area.

Mr. Gadallah and Staff

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

MEDITERRANEAN STUDIES 222. Advanced Literary Arabic

A study of the written language designed to equip the student for investigating contemporary affairs in the East Mediterranean. *Mr. Gadallah and Staff*

MEDITERRANEAN STUDIES 301. Late Assyrian Civilization

This course will meet one hour weekly to analyze Assyrian texts and monuments. The Brandeis collection of Assyrian reliefs (many of them inscribed) will be studied in detail. Outside readings will be assigned on the history, literature, art and archeology of Assyria.

Prerequisite: A knowledge of Assyrian cuneiform.

Mr. Gordon

MEDITERRANEAN STUDIES 400. Research in Mediterranean Studies

Individual guidance for doctoral candidates engaged in thesis research.

Mr. Gordon

Music

OBJECTIVES

The graduate program in Music, leading to the degrees of Master of Fine Arts and Doctor of Philosophy, is designed to assist in promoting creative endeavor and the acquisition of deeper insight into the nature and esthetic basis of music and the historical development of musical styles and techniques.

Two general fields of study are offered in Music:

1. *Musical Composition*—This program leads to the degree of Master of Fine Arts, which is regarded as terminal for composers, who at this point should be able to embark upon a professional career.

2. *Music History, Analysis and Criticism*—This program leads to the degrees of Master of Fine Arts and Doctor of Philosophy. Students may specialize in one of these three categories, but are expected to acquire a background in all three.

ADMISSION

Only a limited number of students will be accepted. The general requirements for admission to the Graduate School, as specified in an earlier section of this catalog, apply to candidates for admission to this area of study.

Applicants for study in Musical Composition will be required to submit, in addition to a transcript of their undergraduate records, evidence of qualification in the form of examples of advanced work in musical theory and original work in musical composition. This work should be submitted together with the formal *Application for Admission*.

Candidates for admission to the Composition program are expected to be proficient at the piano or on some orchestral instrument possessing a standard solo repertory. Such students should furnish information about this when making formal application.

Admission is granted for one academic year at a time. Students in residence must make formal application between March 1 and March 15 to the Department for readmission. Readmission will be refused in cases where students have not demonstrated a capacity for acceptable graduate work.

FACULTY

Associate Professor KENNETH J. LEVY, *Chairman*; Professors *ARTHUR BERGER, IRVING G. FINE; Associate Professor HAROLD SHAPERO; Adjunct Associate Professor ROBERT L. KOFF; Assistant Professor CALDWELL TITCOMB; Mr. MARTIN BOYKAN, Mr. ALFRED NASH PATTERSON, Mr. FRANK PELLEG.

DEGREE REQUIREMENTS

MASTER OF FINE ARTS

Language Requirements—

Group A: French, German, Italian.

Group B: Spanish, Latin, Hebrew, Greek (and other languages at the discretion of the Music faculty).

* On Leave, 1960-1961.

AREAS OF STUDY AND COURSES

A reading knowledge of a language from Group A is normally required of all applicants for admission to a graduate program in Music.

Candidates for the Master's degree specializing in Musical Composition must possess a reading knowledge of two of the above languages, of which at least one must be from Group A. (The combination of Italian and Spanish will not be approved).

Candidates for the Master's degree specializing in Music History, Analysis and Criticism must possess a reading knowledge of two languages in Group A.

Foreign language course credits will not in themselves constitute fulfillment of the language requirements for advanced degrees. All candidates must pass language examinations set by the Music faculty and offered periodically during the academic year. Students are urged to take these examinations at the earliest feasible date. In case of failure, an examination may be taken more than once.

The language examinations are designed to test the students' ability to make ready and accurate use of critical and literary works. Normally each examination will contain three passages for written translation into idiomatic English: (1) classical or modern prose; (2) classical or modern poetry, often poetry that has been set to music; and (3) critical prose dealing with music. Dictionaries may be used in these examinations.

Instrumental Proficiency—At least moderate proficiency at the piano is required of all candidates for advanced degrees.

Residence Requirements—Thirty-six semester hours of work at the graduate level completed with distinction and a thesis are required of all candidates (one course meeting three times a week for two semesters is counted for six hours' credit).

Applicants who have done graduate or advanced work elsewhere may apply for credit for such work. Under any circumstances a minimum residence of one year's work at the graduate level is required.

In general, the program should be completed in two academic years. Students should take no more than four courses in any one year. It is suggested, however, that students pursue no more than three courses during the year in which they take general examinations and submit a thesis. Those students holding teaching assistantships may reduce their load to two courses.

Examinations—Early in March of their first year of study, graduate students will be expected to pass an examination in the standard literature of music from the early eighteenth century to the present. Upon admission, each candidate will receive a list of works to guide his listening.

Candidates for the degree of Master of Fine Arts will be expected to pass with distinction a general examination in musical theory, history, and style at the time of the completion of their program of study.

Thesis—Candidates for the degree of Master of Fine Arts in Musical Composition are required to submit a thesis normally consisting of an original composition in a large form.

Candidates for the degree of Master of Fine Arts in Music History, Analysis and Criticism are required to submit an acceptable written thesis on a topic approved by the Music faculty.

AREAS OF STUDY AND COURSES

DOCTOR OF PHILOSOPHY

Residence Requirements—A minimum of forty-eight semester hours of work at the graduate level completed with distinction is required of all candidates.

In general, the program may be completed in three academic years.

Applicants who have done graduate or advanced work elsewhere may apply for credit for such work.

Language Requirements—Candidates for the Doctor's degree in Music must possess a reading knowledge of all three languages in Group A. (In exceptional cases, the Music faculty may accept a language in Group B in lieu of Italian).

Examinations—Candidates for the degree of Doctor of Philosophy will be expected to pass with distinction a special examination after meeting their language and residence requirements. They will also be expected, after completion of their dissertation, to defend it in an oral examination.

Dissertation—Candidates for the degree of Doctor of Philosophy in Music must submit an acceptable written dissertation on a subject approved by the Music faculty.

Written dissertations should demonstrate the competence of the candidate as an independent investigator, his critical ability, and his effectiveness of expression.

Courses of Instruction

MUSIC 101c. Collegium Musicum

String ensemble, wind ensemble, small choral group.

One three-hour evening session devoted to readings and rehearsals of works drawn from the repertory of music for these media. Some works for the combined groups will be prepared for concert presentation. No graduate credit.

Mr. Koff, Mr. Pelleg and Assistants

***MUSIC 102. Historical Analysis of Music to 1750**

Studies in the development of musical idioms and forms and of the relation of music to society. Detailed analysis of representative works, collateral reading, papers on assigned topics.

MUSIC 103. Historical Analysis of Music from 1750 to the Present

Studies in the development of musical idioms and forms, and of the relation of music to society. Detailed analysis of representative works, collateral reading, papers on assigned topics.

Mr. Titcomb

MUSIC 115c. Choral Conducting

Theory and practice of conducting techniques. Consideration of the problems of rehearsal and performance. Exercises in the conducting of a class chorus in music of various periods.

Prerequisite: A reasonable facility in musical performance, theoretical background, and permission of the instructor. No graduate credit.

Mr. Patterson

MUSIC 138b. Ensemble Workshop

An approach to the interpretation of music based on an understanding of style and structure. The course is designed to give an insight into the various elements that make up musical performance. Students will be grouped into small chamber ensembles which will be coached individually by faculty members. At the begin-

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

ning of the course a supplementary list of works not to be covered during the regular sessions will be distributed. Students will be expected to prepare these works independently and pass an examination on them at the end of the semester.

Mr. Koff and Staff

MUSIC 142. Keyboard Music of the Early Eighteenth Century

Esthetic and stylistic analyses of the keyboard works of Johann Sebastian Bach and his contemporaries; the harpsichord as a modern instrument; the preludes and fugues; the suites; the *Art of the Fugue*; the new style of Scarlatti; the *Empfindsamer Stil*.

Mr. Pelleg

MUSIC 152. Advanced Harmony

Keyboard harmony, harmonic analysis, realization of figured basses, modern harmony.

Two class meetings and two laboratory sessions.

Mr. Fine

MUSIC 153. Principles of Counterpoint

Studies in strict, modal, and tonal contrapuntal writing.

Two class meetings and two laboratory sessions.

Mr. Boykan

MUSIC 154a. Elementary Orchestration

The instruments of the orchestra; their construction, ranges, and playing techniques, with a consideration of their use by major composers; the methods of writing effectively for present-day instruments, individually and in combination; the mechanics of reading and writing a score.

Written exercises, analysis of scores, study of recorded performances and live demonstrations.

Mr. Shapero

MUSIC 154b. Advanced Orchestration

A consideration of complex problems in orchestral combination: balance, weighting, coloration in the modern orchestra; analysis of scores involving large instrumental groups.

Written exercises and advanced score-reading.

Prerequisite: Music 154a or its equivalent.

Mr. Shapero

***MUSIC 155. Advanced Keyboard Harmony and Thorough Bass**

***MUSIC 157. Composition in the Homophonic Forms**

The melodic phrase; types of accompaniment; studies in harmonic rhythm; trio forms, rondo forms, sonata forms, variation forms. Analysis and exercises.

Prerequisite: Music 152 and 153 or their equivalents.

MUSIC 176a. Seminar in Classical Music

A study of historical problems in music of the later eighteenth and early nineteenth century.

Mr. Titcomb

***MUSIC 185a. Berlioz**

A study of the great representative of Romanticism and versatile pioneer of modern music; Berlioz the man, composer, conductor, producer, missionary, literateur, critic, theorist, textbook writer and poet. Main emphasis will be on examination and discussion of selected musical works.

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

Prerequisite: Some advanced training in music history and/or theory. An acquaintance with French is also recommended.

***MUSIC 194b. History and Practice of Music Criticism**

An examination of music criticism from the Baroque to the present day, with special attention to important nineteenth and twentieth century critics.

Prerequisite: A knowledge of music history and theory.

MUSIC 198c. Tutorial in Music History and Literature

Guided reading and research in the history and literature of music.

No credit.

Mr. Boykan

MUSIC 199. Colloquium

Informal monthly meetings of faculty and students for the discussion of musical topics of general interest. Required of graduate students.

No credit.

Staff

MUSIC 200. Materials of Research

This course will acquaint the student with the main tools and materials of research, so as to enable him readily to pursue musicological, critical, and analytical projects in music both old and new. Practical application will be made through investigation and discussion of selected topics of importance or special interest.

Given in alternate years.

Mr. Titcomb

***MUSIC 250. Advanced Musical Analysis**

Investigation of methods of analysis of the total musical structure as distinct from conventional formulae. The intrinsic nature of tones will be considered to determine the relationships to which they lend themselves. The concepts of musical unity of Schenker and other original thinkers in the field of analysis will be examined, applied and evaluated. The role of analysis in criticism.

***MUSIC 256. Canon and Fugue**

Principles governing the construction of invertible counterpoint, various kinds of canon, strict and free fugues. Analysis of classic and modern canons and fugues and detailed study of Johann Sebastian Bach's *Art of the Fugue*. Written exercises.

MUSIC 258. Twentieth Century Techniques

Studies in composition employing musical materials developed in the modern period. Impressionistic harmony, twelve-tone methods, pandiatonism, polytonality, asymmetric rhythm, modern melody and form. Analysis of works by Debussy, Stravinsky, Schoenberg, Milhaud, Hindemith, Copland, and others.

Given in alternate years.

Mr. Shapero

***MUSIC 259. Special Studies in Contemporary Music**

The most representative works of Stravinsky will be analyzed in detail during the first semester and those of Schoenberg and his chief disciples (Berg and Webern) will be similarly treated during the second semester. Emphasis will be placed on apprehension of the essential structure and technique of individual works under consideration.

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

***MUSIC 260. Seminar in Medieval and Renaissance Music**

A comprehensive survey of the history of music from early Christian times through the end of the sixteenth century.

***MUSIC 271a. Problems in the History of Liturgical Chant in the Middle Ages**

Studies in the musical forms, liturgy, and notation of the chants of the Western Church (Gregorian, Beneventan, Old-Roman, Ambrosian, Gallican, and Mozarabic) and of the Byzantine Church. Consideration will be given to the problem of origins in the Early Church and Synagogue.

***MUSIC 272b. Problems in the History of Sixteenth Century Music**

Historical and style-critical studies of French, Italian, and English music from the late works of Josquin through the early recitative style.

MUSIC 278. Problems in the History of Baroque Music

Studies of historical developments in music of the seventeenth and early eighteenth century. *Mr. Pelleg*

MUSIC 280. Problems in the Notation of Music in the Middle Ages

Trouvere notation; modal and mensural notations of the thirteenth century; French and Italian notations of the *Ars Nova*; white notation of the fifteenth century; introduction to Byzantine and Gregorian paleography; readings from the medieval theorists.

Given in alternate years.

Mr. Levy

MUSIC 292. Free Composition

Seminar meetings and private conferences.

Mr. Fine

MUSIC 299. Individual Research and Advanced Work

Individual research and advanced work in musical literature, musical history and in special problems of musical analysis, esthetics, theory and criticism. *Staff*

MUSIC 400. Direction of Doctoral Dissertation

Required of all doctoral candidates.

Staff

* Not to be given in 1960-61.

Near Eastern and Judaic Studies

OBJECTIVES

The graduate program in Near Eastern and Judaic Studies, leading to the Master of Arts and Doctor of Philosophy degrees, is designed to train scholars and teachers in the various cultures of the Near East and of the classical and modern Judaic civilization, and to do further research in these areas. This work is done mainly through study of the relevant languages and literatures and interpretation of historical sources.

ADMISSION

The general requirements for admission to the Graduate School, as specified in an earlier section of this catalog, apply to candidates for admission to this Department.

FACULTY

Professor NAHUM NORBERT GLATZER, *Chairman*: Jewish history. Literature of the Second Commonwealth. Hebrew historiography. Eschatology.

Professor ALEXANDER ALTMANN: History of Jewish philosophy and mysticism. Medieval philosophy. Classical Bible commentaries.

Visiting Associate Professor MOSHE H. GOSHEN-GOTTSTEIN: Arabic language and literature. Aramaic. Dead Sea Scrolls.

Assistant Professor HENRY A. FISCHER: Biblical Apocrypha. Hellenism. Philo. History of religion in late Antiquity. Origins of Christianity.

Assistant Professor DWIGHT WAYNE YOUNG: History of the Ancient Near East. Akkadian, Egyptian, and Coptic. Old Testament philology. Ugaritic.

Dr. BENJAMIN HALPERN: Modern Near East History.

PROGRAM OF STUDY

Among the main fields in the area of Near Eastern and Judaic Studies in which courses are being given in the Graduate School are:

Semitic Languages and Literatures (Akkadian, Arabic, Aramaic, Egyptian, Hebrew, Ugaritic).

History of Ancient Near East.

Cuneiform Studies.

Islamic Studies.

Biblical Studies.

Jewish History.

Medieval Jewish Philosophy and Mysticism.

Fields of study not listed here may be approved.

DEGREE REQUIREMENTS

MASTER OF ARTS

Residence Requirements—The student is required to complete four full courses in the Department. Programs of study are kept flexible; the Department will consider the needs and interests of each student and advise him in outlining a program of study—this program may be modified later by the Department. Students

AREAS OF STUDY AND COURSES

may be required to take courses given by other Departments. A student who can, on admission, give evidence of satisfactory competence in one Semitic language or in one particular field of Near Eastern and Judaic Studies, will be able to complete the program for his degree in one year. Additional resident study may be required of less advanced students.

Language Requirements—Every candidate for the degree of Master of Arts must show proficiency in one Semitic language, and in French or German. In special cases, another modern foreign language may be substituted for one of the two listed here. The foreign language requirements are to be satisfied by examination not later than eight weeks before a candidate is to receive his degree.

Examination—An oral examination is given at the conclusion of the student's residence. The examination is organized around two major subjects chosen from the fields of study undertaken by the student and is designed to test the student's knowledge in those subjects as well as his ability to relate his information to the large area to which those subjects belong. A student who fails to pass the examination, or any part of it, may apply for re-examination, which will take place not earlier than one semester after the date of the first examination.

Thesis—A thesis should be submitted not later than May 1 of the year in which the degree is to be conferred. In certain cases students for the Master of Arts degree may be allowed to substitute one full course of graduate study in lieu of the thesis.

DOCTOR OF PHILOSOPHY

Residence Requirements—The formal course requirement (which varies between five semester courses and four full courses) is established after a conference of the candidate with the Chairman of the Department. However, the main emphasis is placed on the student's individual research.

The residence normally required of a Ph.D. student who is a holder of an M.A. degree is one year; a longer residence will be required for part-time students and students holding teaching assistantships.

A student registered for studies leading to a Ph.D. degree becomes a candidate for the degree when the subject and the synopsis of his dissertation have been accepted by the Department and when he has passed the comprehensive examination (see below).

Language Requirements—A candidate for the Doctor of Philosophy degree in this area must show proficiency in two Semitic languages and in two modern foreign languages, as required by his special field of research. The candidate must satisfy his language requirements not later than at the completion of his required residence in the Graduate School.

Examinations—A written and an oral comprehensive examination in three areas of study (the scope being determined at a conference with the examining board) is given at the conclusion of the student's residence. A student who fails to pass the examination, or any part of it, may apply for a re-examination, which will take place not earlier than one semester after the date of the first examination.

Dissertation and Defense—The student will present a written synopsis and discuss his plans for a dissertation with the professor representing the area, who will assume the supervision of the dissertation. The approval of the supervisor and the Chairman of the Department is required. The conferences on the planning and the progress of the dissertation take place in the Dissertation Colloquium, a course in

AREAS OF STUDY AND COURSES

which the candidate is to register. Normally, the candidate will continue working on his dissertation after the completion of his residence, i.e., as a nonresident student. The dissertation must demonstrate the candidate's thorough knowledge of the field and his competence in independent research, and must constitute an original contribution to knowledge. Two permanently bound copies of the dissertation, one of which must be the original typescript, are to be deposited in the Office of the Department Chairman not later than April 15 of the year in which the candidate plans to take the degree. A defense of the dissertation will be held.

Courses of Instruction

***NEJS 101. Basic Arabic**

The course prepares students for classical and modern Arabic literature. Basic grammar of the language. Readings.

Open to those students who have not previously had instruction in Arabic.

NEJS 102. Intermediate Arabic

Selections from the Qur'an will be studied as a key to Islamic civilization. The linguistic analysis of the text will bring out the relation between Arabic and Hebrew, and lay a foundation for comparative Semitics.

Prerequisite: NEJS 101 or its equivalent. Consent of instructor required prior to enrollment. *Mr. Goshen-Gottstein*

NEJS 104b. Biblical Aramaic

Biblical Aramaic and its relationship to Sam'al Aramaic and to *Reichsaramaisch*. Analysis of Biblical and Egyptian Aramaic texts.

Prerequisite: Knowledge of Biblical Hebrew. *Mr. Goshen-Gottstein*

***NEJS 105. Akkadian**

See MEDITERRANEAN STUDIES 105.

***NEJS 106. Egyptian**

See MEDITERRANEAN STUDIES 106.

***NEJS 108. Ugaritic**

See MEDITERRANEAN STUDIES 108.

***NEJS 109. Akkadian Documents from the Amarna Age**

See MEDITERRANEAN STUDIES 109.

NEJS 112. Biblical Grammar and Readings

A systematic introduction to Biblical grammar (including syntax). A selection of pertinent texts will be studied. *Mr. Goshen-Gottstein*

***NEJS 115a. The Prophets**

Reading of major portions of the prophetic books; interpretation and analysis with special reference to literary, historical and cultural problems: attention will be devoted to elements of prophetic ideas which have influenced later thought.

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

***NEJS 115b. The Wisdom Literature: Job, Proverbs, Ecclesiastes**

Interpretation and analysis of the text and selection of classical commentaries.

NEJS 116a. The Book of Job and the Problem of Evil

A reading of the Book of Job (in English translation) and its parallels in the Ancient Near East literature; a discussion of the role of the Book in the literature and thought of the Western world; an analysis of the problem of evil and of suffering in Judaism and Christianity. (A knowledge of the Hebrew language is not required.)

Mr. Glatzer

NEJS 117a. The Dead Sea Scrolls

Reading of the Manual of Discipline and parts of the Zadokite Work and the Habakkuk Commentary in an attempt to understand the origin of the Dead Sea sects, their beliefs and their attitude to the world around them.

Prerequisite: Reading knowledge of the Hebrew text. *Mr. Goshen-Gottstein*

NEJS 118a. Hellenistic Judaism

Characteristics of Hellenistic literature, philosophy, and religion. A study of some central concepts of Hellenistic thought and their use and modification in Alexandrian Jewish literature. Hellenistic Judaism and early Christianity.

Mr. Fischel

NEJS 118b. Comparative Religion of Late Antiquity

A discussion of the late stages of the Greek, Roman, Egyptian religions; Judaism in late antiquity; Early Christianity, Gnosticism, and mystery religions; Persia and India; the religion of the philosophers.

Mr. Fischel

***NEJS 119a. Introduction to the Apocrypha**

Survey and study of the Apocrypha and Pseudepigrapha, their historical setting and sources, major concepts and ideas; their connections with the sectarian movements, Paganism, and early Christianity.

***NEJS 121a. Introduction to Jewish Mysticism**

A survey of the development of Jewish mystical thought from the early Rabbinic period to the *Zohar*. Reading of selected texts in English translation.

***NEJS 121b. The Pentateuch with Classical Commentaries**

Reading of selections from the books of the Pentateuch; philological and exegetical analysis based on readings from the Tannaitic Midrash and the commentaries of Rashi, Ibn Ezra, and Nahmanides.

NEJS 123b. Maimonides' Mishneh Torah

Study of Maimonides' *Mishneh Torah* as the classical *summa* of Jewish lore and civilization. An introduction to Maimonides as the codifier of Halacha, with special reference to the social and political ideas of Biblical and post-Biblical Judaism.

Given in alternate years.

Mr. Fischel

***NEJS 132a. Classical Jewish Thought**

An introduction to the history of the religious and social ideas of Biblical and Talmudic-Midrashic Judaism (central concepts of God and the Universe, Man

* Not to be given in 1960-61.

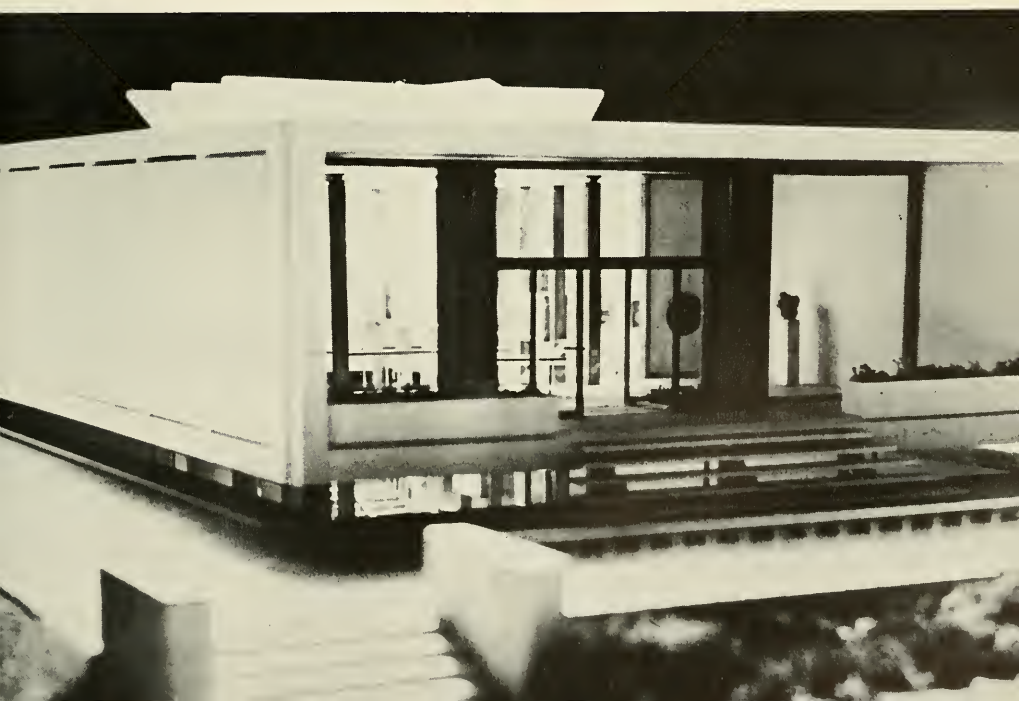


Soon to be constructed . . .

the Spingold Theatre Arts Center

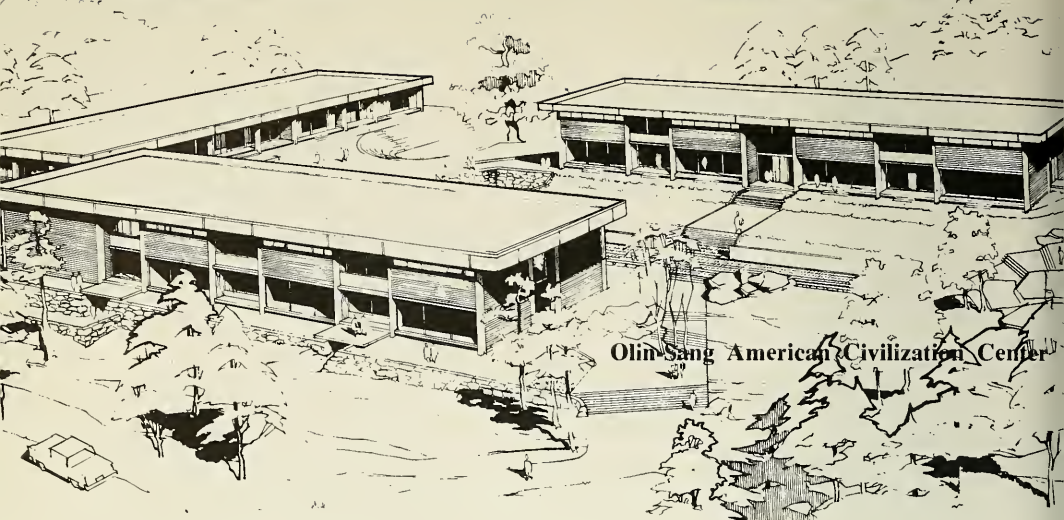
Rose Art Center . . .

now under construction



Golding Judaic Center

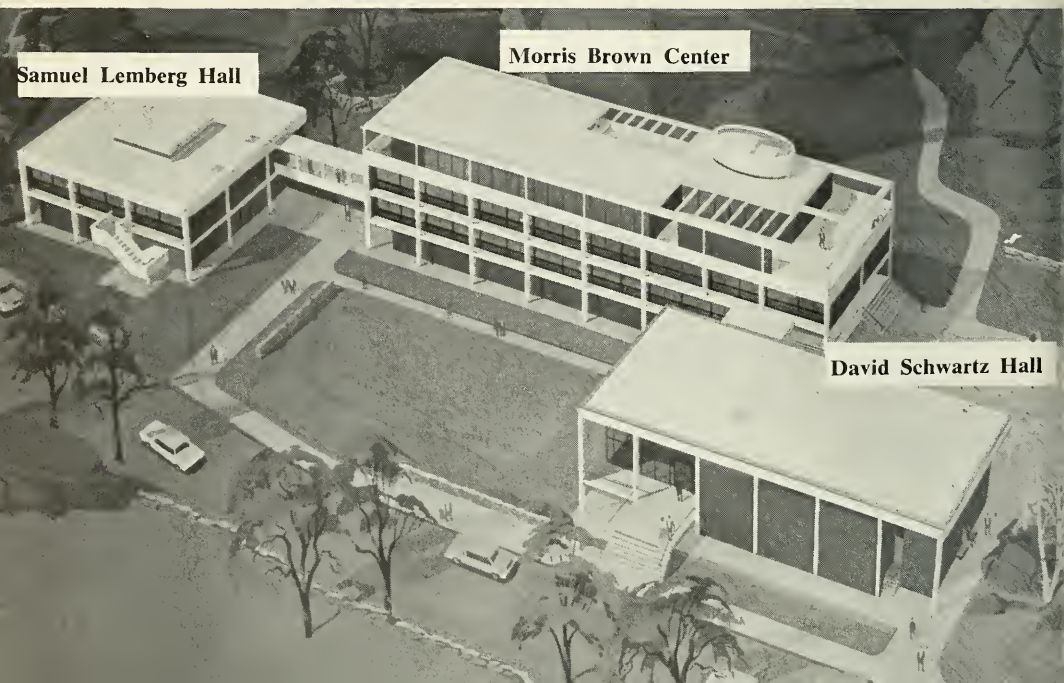
Shiffman Humanities Center



Olin-Sang American Civilization Center

Brandeis Academic Quadrangle

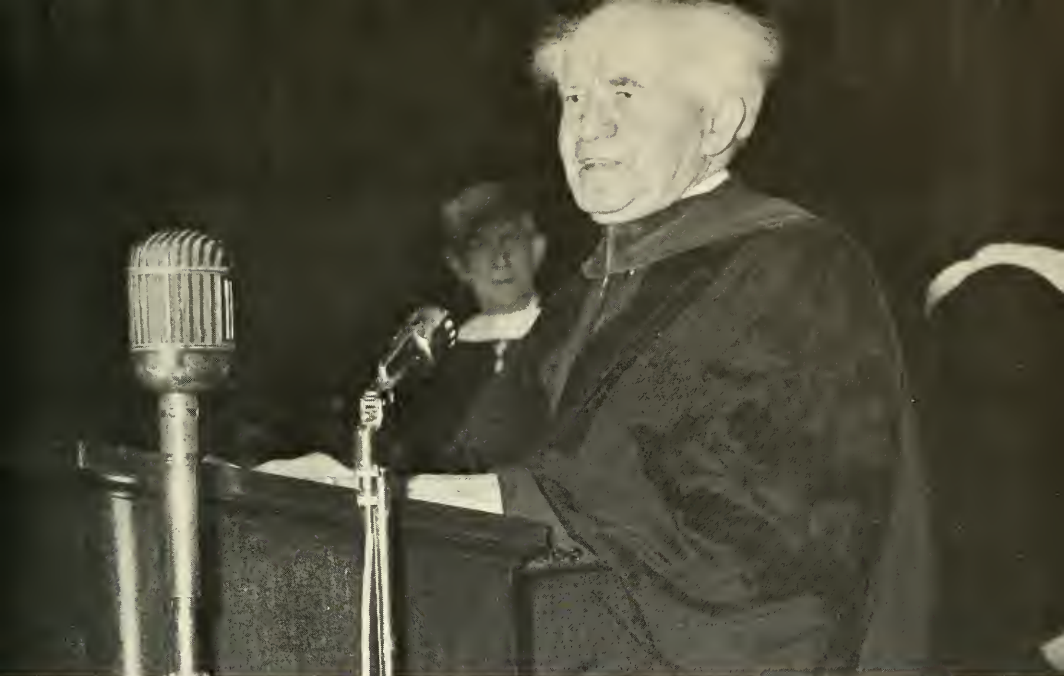
Social Science Center



Samuel Lemberg Hall

Morris Brown Center

David Schwartz Hall



Prime Minister Ben-Gurion . . .
an historic international convocation

Student delegates . . .
a mock national convention

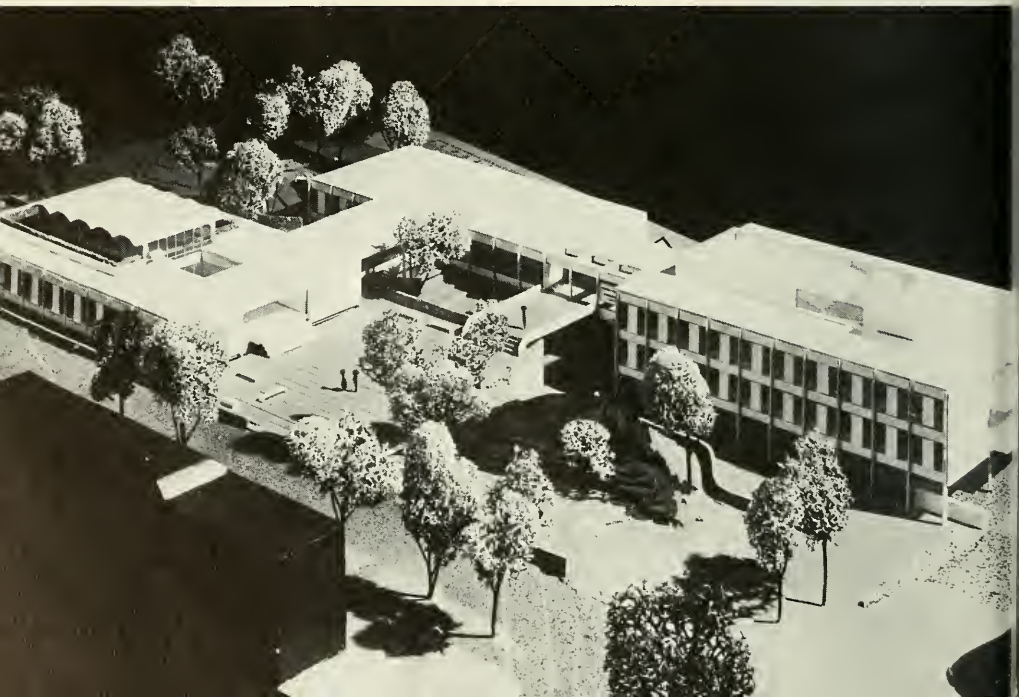




Mailman Hall . . .
a popular student center

©Ezra Stoller

The Administration Center, (left to right) . . .
Gryznish Academic Center, Irving Executive Center, Bernstein-Marcus Hall



AREAS OF STUDY AND COURSES

and History). Post-Talmudic currents of traditional Jewish thought; Jewish mysticism of the Middle Ages; the philosophy of Hasidism and its impact on Jewish thought in modern times.

NEJS 135a. Medieval Jewish Philosophy (Part 1)

A survey of Jewish philosophy from Sa'adya to Maimonides. Analysis of the relation between Jewish thought and its Islamic and Christian environment. Readings of selections from various texts of leading thinkers. *Mr. Altmann*

NEJS 135b. Medieval Jewish Philosophy (Part 2)

A survey of Jewish philosophy in the period following Maimonides until the Renaissance. A survey of the development of Jewish Aristotelianism (Gersonides and the principal Commentators), Hasdai Crescas, Joseph Albo and Isaac Abarbanel. *Mr. Altmann*

NEJS 136b. Jewish Ethical Literature

A survey of the classical works of Jewish ethics from the Talmudic period to the eighteenth century. Analysis of major trends and their historical setting. Reading of selected texts. *Mr. Altmann*

***NEJS 142a. History of Islam**

History of the Muslim Near East, North Africa, and Spain, from Muhammed to the fall of the Ottoman Empire in 1918. Particular attention will be given to the interplay of domestic and foreign policy. The social and intellectual conditions will be outlined. Selections of texts will be presented in translation.

***NEJS 142b. Islamic Religion and Institutions**

Basic trends of the religious and social development of the Muslim peoples. Qur'an and tradition. Scholastic theology. Mysticism. The legal systems. State, cities, religions, brotherhoods, guilds. Islam and the modern world.

NEJS 220. The Islamic Age

The transformation of the Mediterranean as a result of the Islamic Conquest. An institutional history of the Arab World, focusing on the Levant, with a view to providing background for understanding current problems in the area. *Staff*

NEJS 221. Colloquial Levantine Arabic

A workshop aimed at enabling the student to understand the principal dialects and to speak a standard colloquial Arabic intelligible over a maximum area. *Staff*

NEJS 222. Advanced Literary Arabic

A study of the written language designed to equip the student for investigating contemporary affairs in the East Mediterranean. *Staff*

***NEJS 232b. Comparative Semitic Linguistics**

A short history of the Semitic languages. The development of the phonological and morphological systems of the North-West Semitic languages will be discussed, and selected texts will be read.

***NEJS 235b. North-West Semitic Inscriptions**

Hebrew, Aramaic, Phoenician and Moabite inscriptions will be read and analyzed. Linguistic and historical problems will be discussed.

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

***NEJS 241a. History of the Hebrew Language**

Survey of the history of Hebrew from earliest extant documents to modern times. Selected texts will be read.

NEJS 251a. Source Studies in Jewish History: Second Commonwealth

Source studies in the history and culture of Palestine from 538 B.C. to 70 A.D.

Mr. Glatzer

NEJS 251b. Source Studies in Jewish History: The Talmudic Period

Examination of Talmudic-Midrashic material as sources for the political, social and cultural history in the first five centuries.

Mr. Glatzer

***NEJS 253b. Philo**

A study of Philo's major historical and philosophical texts, his sources, environment, and influence; a discussion of contemporary views on Philo.

***NEJS 258a. Studies in Eschatological Theories**

An analysis of Messianic and Apocalyptic concepts in the Ancient World and especially in the Old Testament prophets, Apocrypha and the Dead Sea writings. Students doing graduate work in the field of Hebrew literature will read the texts under discussion in the original Hebrew or Aramaic (as far as available).

***NEJS 258b. Jewish Messianic Movements**

A study, based on original sources, of the origins and development of the messianic idea and of the messianic movements in Jewish history.

***NEJS 259b. Hebrew Historiography**

Reading and critical analysis of selected Jewish historical writings in Late Antiquity and in the Middle Ages. Emphasis will be placed on principles and ideas underlying the historical records. Reference will be made to historical thinking in general, especially in Europe.

NEJS 261a. The History of Palestine (Israel) since the Balfour Declaration

Mr. Halpern

NEJS 310. Judaica Seminar

Study of printed or manuscript material in important areas of Jewish thought. Tracing of literary sources. Introduction to methods of research.

Mr. Altmann

NEJS 320. Readings in Jewish History

Students will be individually supervised in the reading of original source material in the field indicated. Meetings by appointment.

Mr. Glatzer

NEJS 400. Dissertation Colloquium

Messrs. Glatzer and Altmann

* Not to be given in 1960-61.

Physics

OBJECTIVES

The graduate program in Physics is designed to equip the student with a broad understanding of all major fields of physics and to train him to carry out independent original research. This objective is to be attained by formal course work and supervised research projects. As the number of students who are accepted is limited, a close contact between students and faculty is maintained, permitting close supervision and guidance of each student.

Advanced degrees will be granted upon evidence by the student of his knowledge, understanding and proficiency in classical and modern physics, and in mathematics. The satisfactory completion of advanced courses will constitute partial fulfillment of these requirements. Research upon which theses may be based, with residence at Brandeis, can be carried out in the following areas:

Theoretical Physics: Quantum theory of fields; meson theory; quantum electrodynamics; elementary particle physics; general theory of relativity; nuclear physics; quantum statistical mechanics; thermodynamics of irreversible processes; quantum theory of the solid state; the many-body problem; kinetic theory of ionized gases; plasma physics; theoretical astrophysics.

Experimental Physics: Low energy nuclear spectroscopy; high energy experimental physics, primarily work with bubble chambers on the properties of the strange particles.

ADMISSION

As a rule, only candidates for the Ph.D. degree will be accepted. The general requirements for admission to the Graduate School apply to candidates for admission to the graduate area in Physics. Admission to advanced courses in Physics will be granted following a conference with the student at entrance.

FACULTY

Associate Professor SILVAN S. SCHWEBER, *Chairman:* Quantum theory of fields.

Elementary particle physics. Quantum theory of multiparticle systems.

Visiting Professor VALENTINE BARGMANN: Group theory. Quantum mechanics.

General theory of relativity.

Professor DAVID L. FALKOFF: Classical and quantum statistical mechanics. Irreversible processes. Quantum theory of solids.

Associate Professor MAX CHRETIEN: Experimental high energy physics. Elementary particles. Quantum theory of scattering.

Visiting Associate Professor STANLEY DESER: Quantum theory of fields. Elementary particles. General relativity.

Associate Professor KENNETH WILLIAM FORD: Properties and structure of nuclei.

Beta decay theory. Quantum theory of scattering. Field theory.

*Assistant Professor JACK S. GOLDSTEIN: Mathematical physics. Astrophysics. Plasma physics.

*Associate Professor EUGENE P. GROSS: Quantum theory of multiparticle systems. Quantum theory of solids. Kinetic theory of ionized gases.

**Assistant Professor SAUL BARSHAY: Quantum theory of fields. Elementary particle physics.

* On Leave, 1960-1961.

** On Leave, Spring Term, 1960-1961.

AREAS OF STUDY AND COURSES

Assistant Professor RICHARD J. DRACHMAN: Meson theory. Theory of multiparticle systems.

Assistant Professor VERA K. FISCHER: Experimental low energy nuclear physics. Nuclear spectroscopy. Nuclear scattering.

Assistant Professor DANIEL J. KLEITMAN: Field theory and high energy physics.

*Assistant Professor KIRK W. McVOY: Quantum theory of scattering. Low energy nuclear theory. Elementary particles.

Assistant Professor RONALD M. ROCKMORE: Quantum field theory. Many body problem.

Dr. JEROME I. KAPLAN: Electric and magnetic properties of matter. Plasma physics.

Dr. HENRI MITLER: Nuclear physics.

Dr. MENASHA J. TAUSNER: Meson theory.

Dr. HUGH N. PENDLETON, III: Meson theory.

Degree Requirements.

MASTER OF ARTS

Program of Study—The student must complete not less than eighteen semester hours of advanced course work in Physics.

Residence Requirement—The minimum residence requirement for the degree of Master of Arts is one year.

Language Requirement—A reading knowledge of one modern language, which may be chosen from among Russian, German or French, must be demonstrated before the qualifying examination is taken. It is recommended that the language presented be either German or Russian.

Qualifying Examinations—To be recommended for the degree of Master of Arts, a student must pass qualifying examinations at a level considered satisfactory for this degree. The examinations will be given twice every academic year during the week preceding the first week of each semester. The examinations will consist of two written parts which may be taken at the same time or separately. One will cover the fields of classical physics and the other will cover selected topics in modern physics.

Thesis—With the permission of the Department, a thesis on an approved topic may be presented and may be accepted in place of a semester course.

DOCTOR OF PHILOSOPHY

Program of Study—Not less than twenty-seven hours of advanced course work in physics, mathematics, and/or chemical physics must be taken for credit.

Residence Requirement—A minimum of two years of residence is required for the Ph.D. degree.

Language Requirements—A reading knowledge of two languages, chosen from Russian, German or French, is required before the qualifying examination may be taken.

Qualifying Examinations—To be recommended for candidacy for the Ph.D. degree in Physics, a student must pass qualifying examinations at a level considered satisfactory for this degree. These examinations will consist of two parts which may be taken concurrently or separately at different times. Part I will cover the fields of classical physics and Part II, modern physics. Part II also includes an examination on a special topic announced prior to the examination. Qualifying examinations

* On Leave, 1960-1961.

AREAS OF STUDY AND COURSES

will be given twice every academic year during the week preceding the first week of each semester. It is expected that every student will have taken these qualifying examinations before the completion of his second year as a full-time student.

Admission to Candidacy—Students will be admitted to candidacy for the Ph.D. degree upon successful completion of the qualifying examinations.

Dissertation and Defense—The student, after successfully passing the Ph.D. qualifying examinations, will choose a thesis adviser and begin writing a dissertation. This dissertation, summarizing the result of an original investigation of an approved subject and demonstrating the competence of the candidate in carrying out independent research, must be approved by the Department. Upon approval, a final oral examination on the dissertation will be scheduled.

AID TO STUDENTS

A limited number of assistantships, scholarships, and fellowships are available to the most promising candidates. Teaching assistantships are awarded to students in high standing. Research assistantships will be awarded to students of demonstrated ability usually after successfully having passed the Ph.D. qualifying examination. Through the auspices of the IBM Corporation, a limited number of assistantships for the training of students in the use of high speed computing machines are available to students in attendance, upon the recommendation of the Department. The Department, under normal circumstances, will make available summer research assistantships to students in high standing. It is also suggested that the student acquaint himself with the support available from governmental sources such as the National Science Foundation and the Department of Health, Education and Welfare.

Courses of Instruction

PHYSICS 100a. Theoretical Mechanics

Mechanics of point systems. Lagrangian and Hamiltonian methods. Small vibrations. Transformation theory. Integral invariants. Kinematics and dynamics of rigid bodies. Perturbation theory. Relativistic mechanics. Particle accelerators.

Mr. Pendleton

PHYSICS 100b. Electromagnetic Theory

Maxwell's equations. Electrostatics: magnetostatics, boundary value problems. Quasi-stationary phenomena. Radiation.

Mr. Tausner

PHYSICS 101a. Mathematical Physics

Linear vector spaces: matrices, operators, Hilbert spaces. Orthogonal functions. Probability theory.

Mr. Kleitman

PHYSICS 101b. Mathematical Physics

Complex variables. Differential equations. Boundary value problems. Special functions. Integral equations. Numerical methods.

Mr. Drachman

PHYSICS 102a and b. Quantum Mechanics

A critical review of the experiments leading to the quantum hypothesis. Representations, pictures. Schrodinger equation. Harmonic oscillator. Hydrogen atom.

AREAS OF STUDY AND COURSES

Perturbation theory. Hydrogenic spectra. Spin. Addition of angular momenta; helium spectrum. Pauli Principle. Atomic and molecular structure. Elementary scattering theory: atomic and nuclear scattering. *Mr. Deser*

PHYSICS 103a and b. Topics in Modern Physics

Phenomenological and semi-quantitative presentation of such topics as the electric and magnetic properties of matter. Nuclear and electron magnetic resonance. Plasma physics, etc. *Messrs. Kaplan and Mitler*

PHYSICS 190a and b. Advanced Laboratory

Laboratory fee: \$10. *1 credit*

Mr. Chretien and Mrs. Fischer

***PHYSICS 200a. General Theory of Relativity**

Modern formulations of analysis and differential geometry. Equivalence principle. Mathematical formulation of the theory. Schwarzschild solution.

***PHYSICS 200b. Special Theory of Relativity**

Foundations of the special theory of relativity. Minkowski space. Relativistic mechanics. Relativistic theory of classical fields.

PHYSICS 201a. Thermodynamics and Kinetic Theory

Thermodynamics. Chemical Reactions. Irreversible processes. Kinetic theory. Diffusion. Boltzmann equation. *Mr. Falkoff*

PHYSICS 201b. Statistical Mechanics

Ensembles and phase space. Maxwell-Boltzmann distribution. Boltzmann's H-theorem. Bose-Einstein Fermi-Dirac distributions. The quantum mechanical H-theorem. Statistical explanation of thermodynamics. Applications: theory of condensation, low temperature phenomena. *Mr. Falkoff*

PHYSICS 202a and b. Advanced Quantum Mechanics

Formal theory of scattering. Relativistic one particle equations. Elementary quantization of radiation field. Feynman positron theory and applications. *Mr. Rockmore*

***PHYSICS 203a. Nuclear Physics**

Low energy nuclear phenomena. Nuclear forces. Theory of nuclear reactions. Beta-decay. Liquid drop model. Shell model, collective model.

PHYSICS 203b. Elementary Particle Physics

Pair production. Compton effect, Bremstrahlung. Cosmic ray phenomena. High energy meson and nuclear phenomena. *Mr. Barshay*

***PHYSICS 208a and b. Astrophysics**

Hertzsprung-Russell diagram. Classification of stellar systems. Physics of stellar interiors. Radiative transfer problems. Abundances of the elements. Magneto hydrodynamics. Physics of the interstellar medium.

PHYSICS 209. Laboratory Seminar

Analysis of some important recent experiments (such as molecular beams, cyclotron, etc.) to understand apparatus and techniques. *Staff*

1 credit

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

PHYSICS 302a. Quantum Theory of Fields

The theory of interacting quantized fields. Quantum electrodynamics. Mesodynamics. Field theoretical description of the weak and strong interactions.

Mr. Schweber

***PHYSICS 303b. Quantum Theory of Solids**

Adiabatic approximation. Molecular structure. Electronic structure of solids. Specific heats. Theory of electric and thermal conductivity of solids. Electron-lattice interactions. Superconductivity. Collective interactions in solids.

PHYSICS 310a and b. Special Topics

The contents of this course will differ from year to year and will include discussion of the most recent advances in various fields of physics.

Mr. Bargmann

***PHYSICS 321. Seminar in Special and General Relativity**

PHYSICS 322. Seminar in Group Theory and Quantum Mechanics

Mr. Bargmann

PHYSICS 323. Seminar in Quantum Theory of Fields

Mr. Schweber

PHYSICS 324. Seminar in Advanced Statistical Mechanics

Mr. Falkoff

Research Courses

PHYSICS 400. Research in Nuclear Physics

Messrs. Ford and McVoy

PHYSICS 401. Research in Quantum Field Theory

*Messrs. Barshay, Deser,
Ford, Kleitman and Schweber*

PHYSICS 402. Research in the Quantum Theory of the Solid State

Messrs. Falkoff and Gross

PHYSICS 403. Research in Statistical Mechanics

PHYSICS 404. Experimental Research

Mr. Chretien and Mrs. Fischer

PHYSICS 405. Research in Meson Physics

*Messrs. Barshay, Pendleton and
Schweber*

PHYSICS 406. Research in Astrophysics

Mr. Goldstein

PHYSICS 407. Research in the Many Body Problem

*Messrs. Falkoff, Gross and
Rockmore*

* Not to be given in 1960-61.

Psychology

OBJECTIVES

The graduate program in Psychology leading to the degree of Doctor of Philosophy is designed for students of promise in the field of general psychology. Theoretical and experimental studies and research projects rather than formal course training will be emphasized. Courses and seminars in special areas, such as clinical psychology, are offered to all graduate students, but no specialized training or special degrees are given. Graduate programs will be arranged individually in consultation with faculty members.

All regular graduate students must pursue programs leading to the Ph.D. degree. Special students, who are not candidates for a degree, may occasionally be admitted; such admissions are for one year at a time. Candidates for the degree of Master of Arts are not admitted, although that degree may be granted when such an action seems in the best interest of the student. In these cases, the degree is based on the successful completion of a year of regular graduate work, the demonstration of a reading proficiency in one foreign language, and the completion of a Master's thesis. A qualifying examination may also be required.

ADMISSION

The general requirements for admission to the Graduate School, as specified in an earlier section of this catalog, apply to candidates for admission to this area of study.

An undergraduate major in Psychology is not required, although it will be favored. Students with inadequate preparation may make up their deficiencies during their first year, but without residence credit. Preference will be given to students who have completed, in addition to basic courses in theoretical and experimental psychology, a broad liberal arts program with some training in the natural and social sciences. Students will be admitted on a competitive basis which will include evaluation of previous academic record and the results of the Graduate Record Examinations (Advanced, Aptitude and Profile Tests), and the Miller Analogies Test.

All regular graduate students are expected to arrive with or to attain proficiency in the following areas:

- History and Systems of Psychology
- Abnormal Psychology
- Elementary Experimental Methods
- Physiological Psychology

Such proficiency will be evaluated by the Chairman at registration or shortly thereafter.

FACULTY

Professor ABRAHAM H. MASLOW, *Chairman*: Personality theory. Aesthetics. Social interaction.

Professor EUGENIA HANFMANN: Clinical psychology. Personality theory.

Professor HARRY RAND: Clinical practice and training.

AREAS OF STUDY AND COURSES

Associate Professor RICHARD M. HELD: Experimental and comparative psychology. Theories, systems, and history. Perception and learning.

Associate Professor JAMES B. KLEE: Motivation and emotion. Symbolic and cognitive processes. Human and animal learning.

Associate Professor RICARDO B. MORANT: Experimental psychology. Developmental psychology. Perceptual mechanisms.

Associate Professor WALTER TOMAN: Personality and personality theory. Clinical psychology. Child psychology. Psychoanalytic theory.

Assistant Professor RICHARD M. JONES: Educational psychology. Social psychology. Psychotherapy.

Assistant Professor ULRIC NEISSER: Experimental psychology. Human and animal learning. Cognitive processes.

†Assistant Professor DAVID F. RICKS: Clinical psychology, Psychotherapy, Projective tests.

†Adjunct Assistant Professor ELLIOT BAKER.

DEGREE REQUIREMENTS

DOCTOR OF PHILOSOPHY

Four years of full-time graduate study are usually required for the Ph.D.; they must include two years of residence on the Brandeis campus. During these two years, the student will carry fifteen credit units per semester. The ordinary program includes (a) three units in Psychology 300 (Departmental Colloquium); (b) three units in Psychology 200 (Research); (c) Psychology 290-297 (Readings); and (d) three units in each of two other seminars or courses at the 100 level or above. In addition, students may audit any other courses or seminars they desire or need.

Evaluation of Proficiency—A. Students are expected to achieve a thorough knowledge of fundamentals in certain areas of psychology during their first three years. Two general areas and seven special areas have been defined by the faculty as follows:

a. *General Areas:*

1. Systematics: History and Theories
2. Statistical Methods

b. *Special Areas:*

Group A: Experimental Areas

1. Sensation and Perception
2. Learning and Thinking
3. Physiological and Comparative Psychology

Group B: Dynamic Areas

4. Personality and Motivation
5. Psychopathology and Clinical Psychology

Group C: Other Areas

6. Genetic and Child Psychology
7. Social Psychology and Anthropology

B. The student's level of proficiency in the two general areas will be determined by written examinations. The examination in Systematics will be read by all members of the faculty; the one in Statistics by a faculty committee.

† Counselors at the Psychological Counseling Center.

AREAS OF STUDY AND COURSES

C. The student will select one area from each of the three groups listed above in which he will be examined by a committee of the faculty. The examinations may be oral or written, at the option of the student.

D. Some competence is required also in the areas not selected for examination. Determination of minimal competence may be made by any one member of the faculty committee responsible for the area in question. Successful completion of a relevant course or seminar will ordinarily satisfy this requirement, but a formal paper or examination may be requested.

E. Examinations may be taken singly, at various times to be designated by the faculty. Adequate bibliography and sample questions for the guidance of students will be made available.

At least two examinations must have been taken by the end of the third semester of residence.

Individual Research—Each student is expected to engage in collaborative or independent research, with the aim of developing competence in the planning, practice, and evaluation of research. Research work should begin in the first year of residence.

Teaching—Each student, whether or not he receives remuneration as a teaching assistant, is expected to do some undergraduate teaching to develop competence in teaching.

Language Requirements—The demands of the field of the dissertation will determine the foreign languages that the student is expected to master. Reading proficiency in at least one foreign language is required for the Ph.D. degree. This language must be one in which substantial psychological literature exists.

Dissertation and Defense—Before the student begins to concentrate on dissertation research, he will prepare a prospectus of the proposed study, in consultation with a faculty dissertation sponsor. A Dissertation Committee of three or more faculty members will be appointed, including the dissertation sponsor. The Committee will advise the student in his dissertation work and from time to time will report his progress to the faculty.

The student may, if he wishes, ask the Department for *formal acceptance* of his prospectus. A prospectus that is to be formally accepted must provide a detailed outline of the experimental work to be done (if any) and of its theoretical basis. Such a prospectus will be voted upon by all members of the Department. Once the Department has formally accepted a prospectus, it will consider itself bound to accept the resulting dissertation as well, regardless of the experimental results, provided that the proposed work has been carried out conscientiously.

When the student has presented a dissertation prospectus, whether or not he asks for formal acceptance, his Dissertation Committee will be responsible for evaluating his competence in the field of Psychology within which the dissertation falls. This field will ordinarily include more than one of the areas defined above and may include such related areas as sociology, linguistics, one or more physical sciences, etc. The Committee may, at its discretion, require a written examination in the thesis field as a whole or in any part of it.

The dissertation should provide evidence of originality, scholarship and research ability. It should be a contribution to knowledge, ordinarily an experimental research, but not necessarily so. Upon submission to the Chairman of the Department of a copy of the thesis, signed by all three members of the Thesis Committee, and a successful defense of the thesis before all members of the Department, the

AREAS OF STUDY AND COURSES

award of the Ph.D. will be recommended to the Faculty Council of the Graduate School.

Courses of Instruction

PSYCHOLOGY 102a. Psychology of Cognitive Development

The derivation of developmental principles and their application to problems in the areas of learning, thinking, and perception. *Mr. Morant*

PSYCHOLOGY 105a. Memory

Various psychological theories are brought into focus as they apply to the facts of human memory. Gestalt Psychology, Behaviorism, Schema Theory, and Psychoanalysis are discussed in relation to such problems as learning and forgetting, distortion, amnesia, and repression. *Mr. Neisser*

PSYCHOLOGY 106a, or 106b. Field Work in Clinical, Abnormal and Child Psychology

Students will be given an opportunity for observation and practical work in mental or related institutions, nursery schools, and kindergartens, under the supervision of experts and trained personnel. Direct contact with patients or children and discussion with staff members will be afforded. The Waltham School System, Red Barn Nursery School, Massachusetts Mental Health Center, Medfield State Hospital, Greater Framingham Mental Health Center, and other institutions are cooperating.

A student may take only one term for credit. However, if he wishes to continue his work during a second term, and if the institution concerned approves, he may do so without payment of additional fee.

Transportation fee: \$15. per semester.

Mr. Toman

PSYCHOLOGY 107b. Motivation

The theoretical, comparative, clinical, and experimental contributions to a deeper understanding of human needs, wishes and drives. *Mr. Maslow*

PSYCHOLOGY 108a. Personality

Study of the theoretical, clinical and experimental contributions to our understanding of human character and personality, with special emphasis on psychological health and on dynamic theory.

Prerequisite: Psychology 105a, 107b or permission of the instructor. *Mr. Jones*

PSYCHOLOGY 109a. Perception

Study of the history and implications of selected problems in current research in perception.

Prerequisite: Permission of the instructor.

Mr. Morant

PSYCHOLOGY 110a. Psychology of Problem Solving and Learning

A study of the creative process, its background and consequences and its relation to perception and learning theory. *Mr. Klee*

PSYCHOLOGY 111b. Psychology of Symbolic Processes

Culture as studied primarily from the frame of reference of psychology. Dreams,

AREAS OF STUDY AND COURSES

myths, and art as created, expressed, and as used in language, the humanities, and sciences will be studied as psychologist data. The place of psychology in relation to the humanities and the other sciences will be evaluated. *Mr. Klee*

PSYCHOLOGY 112b. Psychology of Emotions

A consideration of the value dimension of the individual's dynamic relation to the world about him in both its positive and disruptive aspects. *Mr. Klee*

PSYCHOLOGY 113a. Choice, Will and the Ego

A revaluation of the "active person." Choice, freedom, and responsibility will be considered as psychological problems. A study will be made of the relevance to choice and action of hedonics, knowledge, reason, and religion, and of man's relation to his perception of good and evil, sickness and health. An assessment of the individual's role in disease and conflict. *Mr. Klee*

***PSYCHOLOGY 114b. Speech, Hearing, and Language**

The findings of physiology, experimental psychology, and linguistics as they bear on hearing and auditory mechanisms; speech; the acquisition and structure of language; verbal thinking and communication.

PSYCHOLOGY 116a. Advanced Child Psychology

The dynamic aspects of child behavior and developments will be studied, discussed and applied in demonstrations. *Mr. Toman*

PSYCHOLOGY 117b. Adolescence and Young Adulthood

An exploration of the tentative contributions of dynamic psychology to understanding the processes of personality integration and change. *Mr. Jones*

PSYCHOLOGY 118a. Physiological Psychology

Those aspects of physiology most relevant to psychological investigation: the anatomy and physiology of receptor and effector organs, the neuron and synapse, sensory and motor neural pathways, the integrative activity of the central nervous system, the autonomic nervous system and the action of hormonal factors.

Mr. Giddon

PSYCHOLOGY 119b. Comparative Psychology

Comparison of the behaviors and forms of animal species aimed at placing human behavior in zoological perspective. Topics include: methods for the study of behavior with consideration of their implied universality, the relevance of evolutionary theory, instinct and learning, survey of species, forms of animal communication and society, man in perspective. *Mr. Held*

***PSYCHOLOGY 121a. Psychological Tests and Methods**

Emphasis is placed on the acquisition of self-knowledge in educational, industrial and clinical settings. The course surveys and evaluates relevant psychometric, consultative and applied research methods.

Enrollment will be limited.

PSYCHOLOGY 125a. Theories in Psychology

An historical and critical approach to the central concepts and problems of psychology aimed at an understanding of current formulations. The underlying

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

structures and assumptions of modern theories will be analyzed as products of the development and transformation of ideas commencing with the rise of modern science. *Mr. Held*

PSYCHOLOGY 126b. Contemporary Theories of Psychology

The viewpoints and controversies that characterize experimental psychology in mid-twentieth century. *Mr. Neisser*

PSYCHOLOGY 200a, b, and c. Individual Research Projects

Messrs. Held, Morant, Neisser and Staff

***PSYCHOLOGY 205b. Research Seminar on Theories in Psychology**

Critical and historical analyses of some major viewpoints in scientific psychology will be made by delineating those assumptions—philosophical, physical, biological, and social—which define the domain, structure, and programs of extant theories.

***PSYCHOLOGY 206a. Seminar in Learning**

Discussion of selected current problems.

***PSYCHOLOGY 207a. Seminar in Perception**

New approaches to the theory of perception.

***PSYCHOLOGY 208a. Seminar in Cognition**

Discussion of selected current problems.

***PSYCHOLOGY 209a. Seminar in Physiological and Comparative Psychology**

Discussion of selected current problems.

PSYCHOLOGY 210b. Advanced Psychological Statistics

Discussion of some of the more important statistical techniques, together with the logic on which they are based. *Mr. Neisser*

PSYCHOLOGY 211b. Personality Theory

Mr. Maslow

***PSYCHOLOGY 213. Introduction to Projective Techniques**

Discussion of theoretical background; demonstration and practice of selected projective techniques.

***PSYCHOLOGY 214. The Psychological Interview**

Discussion of theoretical background; demonstrations or records of data-gathering, diagnostic, counselling, psychotherapeutic, and psychoanalytic interviews; practice in data-gathering and diagnostic interviewing.

PSYCHOLOGY 215. Psychoanalytic Theory

The development of Freudian theory to its present status; the conceptual structure of psychoanalytic theory; its significance for psychotherapy, research and the understanding of man. *Mr. Toman*

PSYCHOLOGY 216a. Selected Clinical Topics

Discussion of theoretical and methodological topics pertinent to the critical study of personality; practice in collecting and interpreting data. The selection of topics and/or exercises will be determined in part by the interests of the participants. *Miss Hanfmann*

* Not to be given in 1960-61.

AREAS OF STUDY AND COURSES

PSYCHOLOGY 217. Seminar in Clinical Research

Practice in conducting systematic research within the framework of psycho-analytic theory and methodology. *Mr. Jones*

***PSYCHOLOGY 218a. Assessment of Traits and Abilities**

Discussion of theoretical background; demonstration and practice of selected instruments of clinical assessment.

***PSYCHOLOGY 219b. Approaches to Psychotherapy**

PSYCHOLOGY 220. Supervised Individual Field Work *Mr. Toman and Staff*

PSYCHOLOGY 221. Clinical Psychopathology *Mr. Rand*

PSYCHOLOGY 290-297. Readings in Psychological Literature

Mr. Toman and Staff

290-1 Methodology: Statistics, Experimental Design, Philosophy of Science

290-2 Systematics: Theories, History, Points of View

291-1 Sensation and Perception

291-2 Learning and Higher Processes

291-3 Physiological and Comparative Psychology

292-1 Personality and Motivation

292-2 Psychopathology and Clinical Psychology

293-1 Genetic and Child Psychology

293-2 Social Psychology and Anthropology

294 Advanced Readings in Methodology and Systematics

295 Advanced Readings in Experimental Psychology

296 Advanced Readings in Dynamic Psychology

297 Advanced Readings in Psychology and Related Fields

PSYCHOLOGY 300. Department Colloquium and Research Seminar

Mr. Maslow and Staff

***PSYCHOLOGY 301. Seminar in Advanced Psychological Topics I**

***PSYCHOLOGY 302. Seminar in Advanced General Psychology**

PSYCHOLOGY 400. Doctoral Dissertation

Mr. Maslow and Staff

* Not to be given in 1960-61.

Sociology

A Graduate Program Leading to the M.A. and Ph.D. Degrees, to Take Effect in 1961-1962

The graduate program in Sociology will be designed for students aiming at the Ph.D. and intending to devote themselves to teaching and scholarly research in Sociology; and for those aiming at the M.A. and intending to devote themselves to applied work in the field. The objective is to train such students in the major areas of Sociology, with specialization in several of them. Among the broad areas of concentration will be Communities; Methodology; Social Organization (including social stratification, political sociology, institutions); Social Psychology and Psychiatry (including mental health and illness, and deviance); and Sociological Theory (including the history of sociology, as well as social causation, change, conflict, the sociology of knowledge and of literature).

Interested applicants may write to the Chairman of the Sociology Department for further information concerning course offerings and degree requirements.

Members of the instructional staff for 1961-62 include:

Professor KURT H. WOLFF, *Chairman*: Sociological Theory.

Professor LEWIS A. COSER: Sociological Theory, Social Organization.

Professor MORRIS S. SCHWARTZ: Social Psychology and Psychiatry.

Associate Professor MAURICE R. STEIN: Communities, Social Organization, Sociological Theory.

Assistant Professor ROBERT A. FELDMESSER: Social Organization.

Assistant Professor SUZANNE KELLER: Social Organization.

Assistant Professor ROBERT S. WEISS: Methodology.

APPENDIX I

Building and Facility Benefactions

ABLIN HALL Ablin Lecture Hall in the Shapiro Athletic Center, contributed by Mr. and Mrs. Leon Jacobs of Miami Beach, Florida, as a memorial tribute to their devoted friend, a distinguished community leader, the late Jack Ablin of Miami Beach, Florida.

ABRAMS CIRCULATION AREA The Hannah W. Abrams Circulation Area established in the Goldfarb Library to honor the second president of the Brandeis University National Women's Committee.

ABRAMS READING ROOM The Joseph Abrams Reading Room in the Goldfarb Library is made possible by a gift in his memory made by Mrs. Joseph Abrams, Newton, Mass., and his children, Warren F. and Lenore R. Abrams.

ALLEN HALL This men's residence hall in Ridgewood Quadrangle is named for Mr. Sidney J. Allen in honor of a benefaction from the Allen Industries Foundation, Inc., of Detroit, Michigan.

ALPHA OMEGA LABORATORIES Established in Ford Hall by Alpha Omega, a national dental fraternity, as the first laboratories subsidized in the years when the University was launched.

ARONSON STUDY AREA Established in the Goldfarb Library as a memorial tribute to his parents, Joseph and Rebecca Aronson, by Mr. Melvin O. Aronson of Newton, Massachusetts.

BARRON HALL The Legislative Hall in the Olin-Sang American Civilization Center has been established in memory of General Bernard S. Barron of New York City, by his wife and a group of his devoted friends.

BELLOWS CARRELS Established in the Goldfarb Library by Mr. and Mrs. Harry Bellows and Harris and Jack Bellows of Montgomery, Alabama, in memory of Sheldon Burt Bellows.

BERKWITZ LABORATORIES The Abram J. Berkwitz Cancer Research Laboratories in the Friedland Science Research Center have been established in memory of his wife, Jeanette A. Berkwitz, and his parents, Morris and Fanny Berkwitz.

BERLIN CHAPEL The Jewish Chapel of Brandeis University's Three Chapels is named for Mendel and Leah Berlin in memory of the parents of Dr. David D. Berlin, distinguished Boston surgeon. It was created by his friends in honor of his fiftieth birthday.

BERNSTEIN-MARCUS ADMINISTRATION CENTER The Bernstein-Marcus Administration Center is the gift of the Trustees of the American Biltrite Rubber Charitable Trust and their families.

APPENDIX

BETHLEHEM CHAPEL The Catholic Chapel of the University's Three Chapels was underwritten by a number of friends under the leadership of Mr. Louis Perini of Boston and Milwaukee, and the late Governor Paul A. Dever of Massachusetts, and by individual members of the Board of Trustees.

BLOTNER LABORATORY A laboratory in the Kalman Science Center established by Mr. and Mrs. Harold J. Silver of Dallas, Texas, as a memorial to Mrs. Silver's mother, the late Bertha Blotner.

BORNSTEIN LIBRARY A facility of the Kalman Science Center, the Samuel and Lena Bornstein Science Library is the gift of Mr. and Mrs. Samuel Bornstein and family of Boston, Massachusetts.

BRANDEIS STATUE Commissioned by Mr. and Mrs. Lawrence A. Wien of New York City, and created by the sculptor, Mr. Robert Berks, for the Centennial of the birth of Justice Louis D. Brandeis. Dedicated in a special Convocation by the Chief Justice of the United States, Earl Warren.

BREITMAN LABORATORY A physics laboratory in the Kalman Science Center established by Mr. Samuel Breitman of Chelsea, Massachusetts.

BRONSTEIN LOUNGE The Jonas and Jessie Bronstein Lounge established in the Ridgewood Residence Hall by Mr. Samuel Bronstein of St. Louis, Missouri, in memory of his beloved parents.

BROWN SOCIAL SCIENCE CENTER The Morris Brown Social Science Center has been made possible by Morris Brown of New Rochelle, N. Y., a Fellow of the University, and by a devoted group of his friends.

BROWN TERRARIUM This facility of the School of Science memorializes Samuel J. Brown in honor of a benefaction from Mrs. Samuel J. Brown of Baltimore, Maryland.

BURTMAN CLASSROOM Established in Sydeman Hall as a memorial tribute to Abraham Burtman by his uncle, Mr. Joseph S. Burtman of Lynn, Massachusetts.

CABLE HALL This men's residence hall in the Leon Court is designated in honor of a benefaction from the late Mr. Robert P. Cable and Mrs. Cable of Chestnut Hill, Massachusetts.

CASTY LABORATORY The Matilda and Frank Casty Science Laboratory, located in Ford Hall, is a gift from the Casty family and friends in Massachusetts.

CHAPEL AREA The central landscaped area of the Three Chapels, with its walks and outdoor altar, has been made possible by a grant from the Mu Sigma Fraternity of New York through the late General Bernard S. Barron.

CHERNER HALL The Joseph Cherner Hall in the Shiffman Humanities Center is established by Mrs. Joseph Cherner in memory of her husband, Joseph Cherner, Washington, D. C.

APPENDIX

CHERNIS CLASSROOM This study facility, located in Sydemann Hall, honors Max and Harriet Chernis of Boston, Massachusetts.

COHEN LABORATORY The Cohen Laboratory located in the Kalman Science Building is established in memory of Samuel Cohen by his wife, and his son, Robert S. Cohen of Westport, Connecticut.

COHEN LOUNGE The Cohen Lounge in the Olin-Sang American Civilization Center is established by Mrs. Hyman Cohen of Chestnut Hill, Massachusetts, in memory of her late husband, Hyman Cohen.

COHEN STUDY Established in the Berlin Chapel in memory of Jack M. Cohen of Chicago, Illinois, by his wife, members of the family, and friends.

COHN LABORATORY The Richard Cohn Chemical Laboratory in Sydemann Hall is a gift of the Richard Cohn Foundation of Detroit, Michigan.

COHN STOCKROOM The Richard Cohn Science Stockroom in the Kalman Science Center is a gift of the Richard Cohn Foundation of Detroit, Michigan.

CROWN WING The Crown Chemistry Wing of Kalman Science Center commemorates Arie and Ida Crown and is the gift of their son, Colonel Henry Crown of Chicago, Illinois.

DANCIGER HALL This men's residence hall in Ridgewood Quadrangle is named in honor of a benefaction from Mr. David Danciger and the late Dan Danciger of Fort Worth, Texas, and the late Sadie Danciger of Tucson, Arizona.

DA VINCI STUDY This room in the Goldfarb Library has been established in honor of the generous donation of Leonardo da Vinci's works by Mr. and Mrs. Bern Dibner of Norwalk, Connecticut.

DEROY HALL This residence hall in Hamilton Quadrangle, the University's main housing and recreation area for women, is designated in honor of Mrs. Helen L. DeRoy of Detroit, Michigan.

EDER LABORATORY The Eder Laboratory in the Friedland Science Research Center has been established by Arthur and Sidney Eder of New Haven and Greenwich, Connecticut, in memory of their parents, Jacob and Pauline Eder.

EDISON GRANT A contribution to the University's plant fund, designation to be determined, made by Mr. Harry Edison, St. Louis, Missouri.

EDISON LABORATORY The Ida and Mark A. Edison Biological Laboratory in the Kalman Science Center has been created by family and friends to memorialize these distinguished St. Louisans.

EDITH MICHAELS HALL The Edith Michaels Hall is established in the Goldfarb Library in honor of the first president of the Brandeis University National Women's Committee.

APPENDIX

- ELFMAN HALL** The Judicial Hall in the Olin-Sang American Civilization Center is made possible by a benefaction from Mr. and Mrs. Ben Elfman, Brookline, Massachusetts.
- EMERMAN HALL** Louis E. Emerman Hall, a men's residence hall in the Ridgewood Quadrangle, is named in honor of a memorial benefaction by the Emerman family of Chicago, Illinois.
- ESSERMAN CARRELS** Established in the Goldfarb Library by Mr. and Mrs. Irving Esserman of Chicago, Illinois, in honor of their grandson, James Neal Esserman.
- FACULTY CENTER AND GUEST LODGE** A major campus facility to serve the faculty and distinguished visitors of the University established through the generous contribution of Lawrence A. and Mae Wien of New York City.
- FALK LABORATORY** The Morris Falk Atomic Structure Laboratory in the Kalman Science Center is a gift of the Morris Falk Foundation of Fitchburg, Massachusetts, Mr. Eli Goodstein, Trustee.
- FEIL ROOM** Located in the Stoneman Infirmary, Feil Room is the gift of the Henry Feil Philanthropic League of New York.
- FEINBERG CLASSROOM** This study facility located in Ford Hall is established as a memorial to Frieda and Leo Feinberg of New York City, through the late General Bernard S. Barron.
- FELDBERG LOUNGE** Occupying the major portion of the Sherman Student Center upper level, this lounge has been named by the Board of Trustees in honor of a benefaction from Mr. and Mrs. Max Feldberg and Mr. and Mrs. Morris Feldberg of Boston, Massachusetts.
- FIELDS LABORATORY** Established in the Louis Goldsmith Wing of the Kalman Science Center in memory of Harry L. and Josephine K. Fields in tribute to their generous benefaction to the University.
- FINE GRANT** The main psychology floor in the Morris Brown Social Science Center is designated in honor of gifts from Harry L. Fine, Palm Beach, Florida and Edward Goldstein, Boston, Massachusetts.
- FLEISHER WING** The entrance hall and doctors' suites of Stoneman Infirmary are located in Fleisher Wing, designated in memory of Mr. and Mrs. J. Morris Fleisher of Boston, Massachusetts, by Mrs. David Stoneman and Mr. Albert Fleisher of Newton, Massachusetts.
- FORD HALL** A major classroom building, Clara and Joseph F. Ford Hall is named to commemorate the gift of devoted friends in honor of the sixtieth birthday of founding Trustee, Mr. Joseph F. Ford of Boston, Massachusetts.
- FOSTER SEMINAR** Located in the Goldfarb Library, the Jennie P. Foster Seminar is established in her honor by her son, Mr. Joseph Foster of Leominster, Massachusetts.

APPENDIX

FRANK HALL This Hall in the Shiffman Humanities Center has been established in memory of Mrs. Rena B. Frank by her family.

FRANKLIN GRANT Established in Sydeman Hall as a benefaction in memory of Ben Franklin of Bellaire, Ohio, by his children toward the University's plant fund.

FRAUWIRTH LABORATORIES Established by Mr. Sidney Frauwirth of New Bedford, Massachusetts, in the Friedland Science Research Center in memory of his daughter, Brenda, and in honor of his wife, Jean.

FRIEDLAND SCIENCE RESEARCH CENTER A contribution of \$500,000 from Mr. Samuel Friedland of Miami Beach, Florida, has made possible the construction of this Science Research Center at the University.

FRUCHTMAN HALL This men's residence hall in Ridgewood Quadrangle is named in honor of Mr. Charles Fruchtmann of Toledo, Ohio, and was made possible through his generosity and that of his sons, Leonard and Irwin.

GARSON HALL The English and American Literature Hall in the Shiffman Humanities Center has been created by the family of Frank Garson to memorialize this distinguished New Yorker.

GETZOFF LABORATORY The Laboratory for Immunological Studies is located in the Friedland Life Science Building and is established by the bequest of Mathilda E. Getzoff as a memorial to her husband, Emanuel B. Getzoff of Chicago, Illinois.

GIBBS LABORATORY A facility of Kalman Science Center, the Jacob Gibbs Laboratory is dedicated in his memory by his sons, Henry and Paul Gibbs of Saugus, Massachusetts.

GINSBURG LABORATORY Established in the Friedland Science Building in honor of a benefaction from Ethel and David Ginsburg of West Chester, Pennsylvania.

GOLDFARB LIBRARY The Goldfarb Library has been made possible by a benefaction of \$1,500,000 from Jack A. and Bertha Goldfarb of New York City and a pledge of \$1,000,000 from the National Women's Committee.

GOLDIN LABORATORY Established by Mr. and Mrs. Nathan I. Goldin of Detroit, Michigan, in Sydeman Hall.

GOLDING JUDAIC CENTER This teaching facility is the gift of Messrs. Harry W. and Julius Golding of New York City.

GOLDMAN-SCHWARTZ FINE ARTS STUDIOS The Goldman-Schwartz Fine Arts Studios, made possible by Mr. and Mrs. Charles Goldman and Mrs. Joseph H. Schwartz of New York City, are established in memory of Joseph H. Schwartz and Robert Harris Goldman.

APPENDIX

GOLDSMITH GRANT A contribution to the University's plant fund, designation to be determined, made by Mr. Horace W. Goldsmith of New York City.

GOLDSMITH WING The Louis Goldsmith Memorial Wing in the Kalman Science Center is the gift of family, friends and co-workers in Philadelphia, Pennsylvania, and New York City.

GOLDSTEIN GRANT The main psychology floor in the Morris Brown Social Science Center is designated in honor of gifts from Edward Goldstein, Boston, Massachusetts and Harry L. Fine, Palm Beach, Florida.

GOODMAN HALL The Abraham Goodman Hall in the Goldfarb Library is a gift of Mrs. Abraham Goodman, of Shelbyville, Indiana in memory of her husband.

GORDON CLASSROOM The Samuel and Celia Gordon Room has been established through the will of Samuel Gordon of Brookline, Massachusetts.

GORDON FIELD The University's varsity field is named in memory of Celia and Samuel Gordon of Brookline, Massachusetts, by Mr. and Mrs. Frank B. Gordon and Mr. Louis Gordon.

GORDON HALL This men's residence hall in the Leon Court is the gift of Maurice and Dorothy Gordon of Boston, Massachusetts.

GOLDBERG CARRELS Established in the Goldfarb Library by the late Miss Celia Goldberg of New York City, in memory of her parents, Morris and Rhoda B. Goldberg.

GROSBERG CLASSROOM The Oscar Grosberg Memorial Classroom is established in memory of her husband by Mrs. Oscar Grosberg of St. Louis, Missouri.

GRUNDFEST WING Located in the Kalman Science Center, the Sam and Mabel Grundfest Research Wing is a memorial tribute established by family and friends of Hollywood, Florida, and Little Rock, Arkansas.

GRYZMISH ACADEMIC CENTER The Gryzmish Academic Center, a unit of the Brandeis Administration Center, is made possible by a benefaction from Mr. and Mrs. Reuben B. Gryzmish of Boston.

GRYZMISH FUND Established by Florence L. and Mortimer C. Gryzmish, Brookline, Massachusetts, as an initial grant, subsequently to be augmented, for the purpose of underwriting a physical facility on the Campus that will serve the future needs of the University.

HALPERIN LABORATORY The Abraham Halperin Physical Chemistry Laboratory in the Kalman Science Center is a gift from the Halperin family of Brooklyn, New York, Esther, Meyer, and Samuel J. Halperin and Nettie H. Melker.

APPENDIX

HARLAN CHAPEL This, the Protestant Chapel of the University's Three Chapels, has been named in memory of former Supreme Court Justice John Marshall Harlan, and underwritten by a group of friends of the University under the leadership of Mr. C. Allen Harlan of Detroit, Michigan.

HARRIS CLASSROOM The Nathan and Ella Harris Memorial Classroom in Ford Hall is established by their son, Mr. Herman Harris, of St. Louis, Missouri.

HARRIS GRANT A contribution to the University's plant fund, designation to be determined, made by Mr. Mark L. Harris, Miami Beach, Florida.

HAYDEN SCIENCE QUADRANGLE An allocation of \$500,000 from the Charles Hayden Foundation, made possible by the late J. Willard Hayden and his fellow trustees to launch the science facilities of the University in its pioneering years.

HEINEMANN CARRELS Established in the Goldfarb Library by Helen Heinemann of Jonesboro, Arkansas, in memory of her parents, Joseph and Jennie Schatz Heinemann.

HELLER LABORATORY Named to honor a benefaction by the designee of San Francisco, California, the Clara Hellman Heller Biology Laboratory for Student Research is in Kalman Science Center.

HERBERT HALL The Grace H. Herbert Hall in the Goldfarb Library is the gift of Mr. Jerome Herbert of Hollywood, Florida, in memory of his wife.

HORWITZ MUSIC SEMINAR Established in memory of Henry Moses Horwitz by Mr. and Mrs. Samuel J. Spector of New York City, this music seminar is located in the Goldfarb Library.

IRVING PRESIDENTIAL ENCLAVE The Julius and Matilda Graubart Irving Presidential Enclave in the Brandeis Administration Center is made possible by the generous gift of Mrs. Julius Irving, Providence, Rhode Island.

JACOBSON LANGUAGE LABORATORY The Language and Phonetics Hall in the Shiffman Humanities Center is the gift of Mr. and Mrs. Eli Jacobson of Worcester, Massachusetts.

KALMAN SCIENCE CENTER The Julius Kalman Science Center, named in honor of the late Boston financier, is the major facility of Brandeis University's School of Science, and the main structure of the Hayden Science Quadrangle.

KANE REFLECTING POOL This central feature of Hamilton Quadrangle's landscaped area is a memorial to Anne J. Kane, given by her family of Cleveland, Ohio.

KAPLAN HALL The Lincoln Hall in the Olin-Sang American Civilization Center, sponsored by Mr. and Mrs. Kivie Kaplan, Chestnut Hill, Massachusetts.

APPENDIX

KAPLAN LABORATORY A faculty research laboratory in the Kalman Science Center established in memory of Arlene Zelda Kaplan by her parents, Mrs. Edward Kaplan and the late Mr. Kaplan of Cleveland, Ohio.

KAUFMANN FOUNDATION The nursery of the Child Psychology Center in the Social Science Center has been equipped by a gift from the Henry Kaufmann Foundation, New York City.

KIRSTEIN GRANT A contribution to the University's plant fund, designation to be determined, made by Mr. Meyer Kirstein of Swampscott, Massachusetts.

KRIVOFF HALL The Four Freedoms Hall is established in the Shiffman Humanities Center through a generous gift from Hyman Krivoff, New Bedford, Massachusetts.

KUTZ HALL A major facility in the Leon Court, the Milton and Hattie Kutz Hall is the gift of Mrs. Hattie Kutz of Wilmington, Delaware in memory of her husband, Milton Kutz.

LANG-YAFFE HALL This Hall in the Shiffman Humanities Center is named for Arthur Lang and George Yaffe in honor of a benefaction from the Lang and Yaffe families.

LANDAU ROOM Established in the Stoneman Infirmary through a contribution under the will of Morris Marks Landau of Los Angeles, California.

LASKER HALL The Germanic Hall in the Shiffman Humanities Center was established by the late Loula Lasker in honor of her parents, Morris and Nettie Lasker of New York City.

LECKS GRANT A contribution to the University's plant fund, designation to be determined, made by Mr. Herman Lecks of Margate City, New Jersey.

LEE MUSIC SEMINAR This facility in the Goldfarb Library is the gift of Mrs. Sadye R. Lee, New York, New York.

LEHMAN LOUNGE One of the residential hall lounges in the men's Ridgewood Quadrangle, designated in honor of Leo Lehman by Mr. and Mrs. Mortimer Gryzmish of Boston, Massachusetts.

LEMBERG HALL This unit of the Social Science Center, housing the University's Child Psychology Center and the Psychological Counseling Center, is the gift of Mr. and Mrs. Samuel Lemberg, New York City.

LEON COURT The Adolf and Felicia Leon Court, which comprises all the residence facilities in the north campus, is a gift from the estate of Adolf Leon of New York City.

LEVIEH HALL Established in honor of his mother, the Sara A. Levien Hall in the Goldfarb Library is the gift of Mr. Francis S. Levien, New York and Connecticut.

APPENDIX

LEVINSON HALL This Lounge Hall in the Olin-Sang American Civilization Center is named for Mr. Albert Levinson of California, in honor of a benefaction from the Levinson family.

LOPIN WING The Sam A. and Anna M. Lopin Physics Wing is located in the Kalman Science Center. It is the gift of Mr. and Mrs. Sam A. Lopin, Mr. and Mrs. William Mazer, and Mr. and Mrs. Joseph Mazer, all of New York City.

MACK LABORATORY The Frank and Rebecca Mack Research Laboratory in Kalman Science Center is a memorial gift from Mr. Sol Mack and family of Edwardsville, Illinois.

MAILMAN STUDENT CENTER This major adjunct to the Ridgewood Quadrangle men's residential area is made possible through a gift from Messrs. Abraham and Joseph Mailman of Hollywood, Florida, and New York City.

MANGEL HALL The Presidential Hall in the Olin-Sang American Civilization Center is a gift of Mr. and Mrs. Emanuel Mangel of New York, N. Y., in memory of their son Martin Elliott Mangel.

MARCUS FIELD The Abraham Marcus Playing Field is dedicated in memory of the late Baltimore community leader by his family and the late Richard Marcus.

MARCUS WING Located in the Kalman Science Center, the Richard Marcus Microbiology Wing is established in his memory by family and friends of Baltimore, Maryland.

MARKS HALL This Hall in the American Civilization Center is established in memory of Louis, Isaac, Ellis and Abe Marks by their sisters, Mrs. Bessie Greenbaum and Mrs. Jane Goldman of Chicago, Illinois.

MCKINLEY LOUNGE The William McKinley Lounge, donated by the William McKinley Lodge of New York City, is located in Ridgewood 20.

MEMPHIS TRACT A 26-acre plot on the eastern side of South Street, purchased by friends of the University in Memphis, Tennessee, under the leadership of Abe D. Waldauer, is accordingly designated the Memphis Tract.

MENDELSON LODGE CARRELS Established in the Goldfarb Library by the Moses Mendelsohn Lodge, F.S. of I., in memory of Harry D. Greenblatt.

MEYERS HALL The Harry and Celia Meyers Hall is a seminar room in the Goldfarb Library. It is the gift of Mrs. Harry M. Meyers, Lawrence, Mass., in memory of her husband.

MIDDLESEX HEALING ARTS FOUNDATION A fund that is being accumulated by the Middlesex Chapter of the Brandeis Clubs for the purpose of establishing a facility in the area of the Healing Arts that will serve as a permanent testimonial to Middlesex University and to its Founder, Dr. John Hall Smith. The income from this fund is to be used for scholarships, teaching, and research in health-related fields, until such time as the principal is expended.

APPENDIX

MINOV CLASSROOM Established through a contribution of Mr. and Mrs. Morris I. Minov of Chicago, Illinois, to strengthen the plant fund of the University.

MINTZ THEATRE ARTS HALL Designated in the Goldfarb Library by a benefaction from Mr. and Mrs. Herman A. Mintz, Boston, Mass.

MORRIS & SON CONSTRUCTION CO. GRANT A contribution to the University's plant fund made by the Morris & Son Construction Co., Lowell, Massachusetts, Morris Palefsky, President; Irving S. Paley, Treasurer.

MORRIS GRANT A contribution from Mrs. Marcella Morris of New York City to strengthen the physical facilities at the University.

MORSE WING The Joseph L. Morse Wing in Economics to include an entire floor in the Brown Social Science Center is the gift of Mr. Joseph L. Morse, Mamaroneck, New York, and Palm Beach, Florida.

NILES HALL The Human Rights Hall in the Olin-Sang American Civilization Center is made possible by a memorial gift from the Trustees of the David K. Niles Fund.

OLD LIBRARY BUILDING This building, a gift of the Brandeis University National Women's Committee, was the original library, serving the needs of the university from September 1948 to November 1959.

OLIN MACHINE SHOP Located in Kalman Science Center as a memorial to Louis B. Olin by his family of Chicago, Illinois.

OLIN-SANG AMERICAN CIVILIZATION CENTER The Olin-Sang American Civilization Center and the Washington Hall of the American Civilization Center are made possible by a generous benefaction from the Olin-Sang Foundation of Chicago, Illinois.

PAPPAS GRANT A contribution to the University's plant fund, designation to be determined, made by Mr. Thomas A. Pappas, Boston, and Mr. John C. Pappas of Milton, Massachusetts.

PEARLMAN GRANT A contribution made by Mr. Harry Pearlman of New York City to the University's plant fund with designation to be determined.

PERINI SACRISTY Established in the Catholic Chapel as a memorial tribute to Bonfiglio and Clementina Perini by their sons, Louis, Joseph and Charles.

PHILLIPS SCIENCE HALL Located in the Goldfarb Library, the Jay Phillips Science Hall is the gift of Mr. Jay Phillips of Minneapolis, Minnesota and a group of his devoted friends.

PROSTERMAN LOUNGE The Samuel and Yeva Prosterman Lounge in Ridgewood Quadrangle is a gift of the Prosterman family of Miami Beach, Florida.

APPENDIX

PUBLIC HEALTH SERVICE, DEPARTMENT OF HEALTH, EDUCATION AND WELFARE GRANTS A special subvention to supplement the Samuel Friedland contribution for the establishment of the Friedland Science Research Center of the University and an allocation toward the equipment for the Science Research Center.

RABB GRADUATE CENTER Chief facility of the Graduate School of Arts and Sciences, the Rabb Graduate Center is made possible by the benefaction of Joseph and Lottie Rabinovitz of Boston, and their children, Sidney, Norman and Irving Rabb of Boston and Mrs. Sydney Solomon of New York.

RAPAPORTE TREASURE HALL The Rapaporte Treasure Hall of the Goldfarb Library, is a gift of Mr. and Mrs. Samuel J. Rapaporte, Providence, Rhode Island.

REITMAN HALL Located in the Leon Court, this men's residence hall is a gift in honor of Anne and Frank H. Reitman of East Orange, New Jersey.

RENFIELD HALL A women's residence hall in the Hamilton Quadrangle, Anna Renfield Hall has been so designated in honor of a bequest by the Anna Renfield Charitable Trust through Mr. Louis Geller, Trustee.

RESLER LABORATORY Established in the Science Center by Mr. and Mrs. Jack Resler of Columbus, Ohio, to facilitate a program of cancer research at the University.

RIEGER TENNIS COURTS Established through a benefaction by the family and friends of the late Maurice H. Rieger of Chicago, Illinois, as a memorial tribute to augment the athletic facilities of the University.

ROBBINS SEMINAR The Gen-Mort Robbins Seminar in the Goldfarb Library is the gift of the Gen-Mort Robbins Foundation, Chicago, Illinois.

ROGOFF WING The Dr. Julius M. and Fannie Rogoff Physiology Wing in Kalman Science Center is the gift of the Rogoff Foundation of Rowayton, Connecticut.

ROSE ART MUSEUM The Rose Art Museum is a benefaction from Mr. and Mrs. Edward Rose, Boston, Massachusetts.

ROSEN HALL This men's residence hall in Ridgewood Quadrangle is named for Arthur and Sadie Rosen in honor of a benefaction by their children, Carl and Leo Rosen of Boston, Massachusetts.

ROSENBERG EXHIBIT HALL The main hall and exhibit area of the Goldfarb Library has been designated the James N. Rosenberg Exhibit Hall in honor of a benefaction from Mr. James N. Rosenberg, Scarsdale, New York.

ROSENSTIEL WING Located in Friedland Life Science Research Center, the Dorothy H. and Lewis Rosenstiel Foundation Biochemistry Wing is the gift of the Dorothy H. and Lewis Rosenstiel Foundation of New York City.

APPENDIX

RUBINSKY CARRELS Established in the Goldfarb Library in memory of Anna L. Rubinsky by the members of her family.

SACHS STUDY AREA Established in the Goldfarb Library by the late Morris B. Sachs of Chicago, Illinois.

SALOMON FUND The interior furnishings of the Faculty Center and its Guest Lodge have been provided through a fund created by Cecile and Irving Salomon of Escondido, California.

SALVAGE RESEARCH WING The ground floor laboratories in the Friedland Science Research Center are designated in honor of a benefaction from Mr. and Mrs. Louis Salvage, Swampscott, Mass.

SAMPSON CARRELS Established in the Goldfarb Library in memory of David Sampson, New York City.

SCHEFFRES HALL Located in the Leon Court, this men's residence hall is the gift of Ethel and A. W. Link Scheffres, New York City.

SCHLOSSBERG LABORATORY Established in Sydeman Hall by Mr. Max Schlossberg of Chicago, Illinois, to strengthen the science facilities.

SCHNEEBERG CARRELS Established in the Goldfarb Library by the Estate of Jac Schneeberg of New York City.

SCHWARTZ HALL This sister structure to the Castle, a women's residence hall, is named in honor of Nathan and Ida Schwartz of Boston, Massachusetts, and was presented to the University by their children, Joseph and Irving Schwartz.

SCHWARTZ HALL A major facility of the Social Science Center, the David and Irene Schwartz Hall is the gift of Mr. and Mrs. David Schwartz of New York City.

SEIFER CARRELS Established in the Goldfarb Library by Mr. and Mrs. Edwin H. Seifer, New York City, in memory of Morton Bruce Zuckerman.

SEIFER HALL Seifer Hall, an auditorium in Ford Hall, was given to the University as a memorial to the late Nathan Seifer, through the Nathan Seifer Foundation, by his children.

SHAPIRO ATHLETIC CENTER Dedicated to the memory of a founding Trustee, the Abraham Shapiro Athletic Center is the gift of his family and friends. It is the University's main athletic structure.

SHAPIRO FORUM The Theodore Shapiro Forum in the Olin-Sang American Civilization Center is a gift of Mr. Theodore Shapiro of New York City.

APPENDIX

SHAPIRO HALLS The Morris and Esther Shapiro Halls are two major residence halls in the Hamilton Quadrangle, made possible through the gifts and bequest of a founding Trustee of the University and designated in tribute to the pioneering devotion and generosity of the late Morris Shapiro of Newton, Massachusetts.

SHAPIRO JUDAICA HALL The Alexander and Pauline Shapiro Judaica Hall in the Goldfarb Library designated in honor of the gift of Mr. and Mrs. Alexander Shapiro, Newton, Mass.

SHAPIRO ROSE GARDEN A planting of perennials in memorial tribute to Solomon and Rose Shapiro by their children, Mrs. Sidney Janus of Atlanta, Georgia, and Mrs. Isaac Putterman of Brooklyn, New York, to help landscape the Three Chapel area.

SHELLEY-LEVINSON MUSIC ROOM This recreation and practice room in Morris and Esther Shapiro Hall A is a gift of the Shelley-Levinson Foundation of Chicago, Illinois, through Mr. J. J. Shelley.

SHERMAN STUDENT CENTER A major facility in the Hamilton Quadrangle, the Sherman Student Center is the gift of Mr. and Mrs. George Sherman of Newton, Massachusetts.

SHIFFMAN HUMANITIES CENTER The Shiffman Humanities Center has been underwritten by Abraham Shiffman through the Shiffman Foundation, Detroit, Michigan.

SHMIKLER HALL Located in Stoneman Infirmary, this hall is designated in memory of Sam and Norman Shmikler in honor of a benefaction from Joseph, Raymond, William and Gilbert Shmikler of Champaign, Illinois, sons of Sam Shmikler.

SIMONOFF ROOM The George Simonoff Infirmary Room, located in Stoneman Infirmary, is the gift of Mr. and Mrs. Louis Simonoff of New York City.

SLOSBERG MUSIC CENTER A major facility for the School of Creative Arts, the J. A. and Bessie Slosberg Music Center is made possible by a benefaction of the J. A. and Bessie Slosberg Charitable Foundation whose trustees are Charles Slosberg, M. M. Landay and Samuel L. Slosberg.

SMITH CLASSROOM The Celia Alch Smith Classroom in Ford Hall is the gift of Mr. Elwin Smith of St. Louis, Missouri, in honor of his mother.

SMITH ROOM The Harry B. Smith Memorial Room in Ford Hall is established through a gift of his son, Mr. Elwin Smith of St. Louis, Missouri.

SNIDER HALL Located in the Goldfarb Library, the Eliot and Ruth Snider Hall is the gift of Eliot and Ruth Snider of Waban, Massachusetts.

APPENDIX

SPINGOLD THEATRE ARTS CENTER The Nate and Frances Spingold Theater Arts Center will be constructed in the near future. This building is made possible by a bequest from the late Nate Spingold, and a generous additional benefaction by his wife, Frances.

STEIN HALL The Philosophy Hall in the Shiffman Humanities Center has been designated in honor of a benefaction from Mr. and Mrs. Isadore Stein, Brookline, Massachusetts.

STERN HALL The Classics Hall in the Shiffman Humanities Center has been established in memory of Hyman and Rebecca Stern of Boston, Massachusetts, by their family.

STONEMAN INFIRMARY The David Stoneman Infirmary, mainly underwritten by Mrs. David Stoneman and family of Newton, Massachusetts, memorializes her late husband and sons, Harold and George Stoneman.

SWARTZ WING Comprising the entire third floor of the Friedland Science Building, the Edward M. and Gertrude W. Swartz Wing is designated in honor of a benefaction from Edward M. and Gertrude W. Swartz, Brookline, Massachusetts.

SYDEMAN HALL The William H. Sydeman Hall, an annex to Ford Hall, memorializes the former Bostonian and New York merchant. It is the gift of his former New York associates, Messrs. James G. Faherty, Abraham Mandel and Joseph J. Wood.

SYDEMAN LABORATORY The William H. Sydeman Laboratory memorializes the donor and is located in the facility which was established by his business associates.

SYLVAN LABORATORY Established by Mr. and Mrs. Jack Sylvan of Detroit, Michigan, to strengthen the science facilities of the University.

TANNENBAUM SUITE The Tannenbaum Suite in the Stoneham Infirmary is established in memory of William and Ellen Tannenbaum, Portland, Oregon, by the executors of the William and Ellen Tannenbaum Estate.

ULLMAN AMPHITHEATRE Adolph Ullman Amphitheater is made possible by a benefaction of the late Boston philanthropist who helped to found and develop the Brandeis University School of Creative Arts.

UPTOWN TALMUD TORAH CLASSROOM Located in Sydeman Hall, this classroom is designated in honor of a benefaction from the Uptown Talmud Torah Association of New York.

USEN HALL A residence hall in the University's main housing and recreational area for women, Edyth and Irving Usen Hall is named to honor the gifts and the service of the designees since the University's founding days.

APPENDIX

USEN LOUNGE Established as the Commons Room in the Castle through a contribution from Mr. and Mrs. Irving Usen of Newton, Massachusetts.

VERSHBOW HALL The Jennie and Herman Vershbow Hall in the Goldfarb Library is the gift of Mr. and Mrs. Herman Vershbow, Brookline, Massachusetts.

VICTOR CARRELS Established in the Goldfarb Library in memory of Michael Victor II of Springfield, Illinois by a group of friends.

WALD STUDY AREA Located in the Goldfarb Library, the Wald Study Area is named in honor of a gift from Harold and Ellen Wald of Chestnut Hill, Massachusetts.

WEINBERG ART AREA The exhibit and study area of the Goldfarb Library, devoted to the fine arts, is a gift of the executors of the Wilhelm Weinberg Estate.

WEINSTEIN LABORATORY The Samuel Weinstein Laboratory in the Friedland Science Research Center has been established in his memory by his wife, Miriam, and his children, Mr. and Mrs. Stanley Jacobs and Mr. and Mrs. Melvin Weinstein of Newton, Massachusetts.

WOODRUFF HALL The Louis S. and Millie Woodruff Hall is named to commemorate the gift of Mr. Harold Woodruff of Toledo, Ohio, in memory of his parents. A two-story annex is named in honor of Tamra Lou Woodruff.

YAFFE HALL This Hall in the Shiffman Humanities Center is named for Hyman Yaffe of Boston, Massachusetts, in honor of a benefaction from the Yaffe family.

YALEM GRANT A contribution to the University's plant fund, designation to be determined, made by Mr. Charles H. Yalem, St. Louis, Missouri.

YOUNG CLASSROOM Located in Ford Hall, this classroom is the gift of Nathan Young in memory of his parents, Moses and Pauline Young, New York.

ZIMBLE READING ROOM The main reading room of the Goldfarb Library is contributed by Louis and Abraham Zimble, Newton, Mass.

APPENDIX II

Endowment Funds

DELIA AND LOUIS BAER MEMORIAL LIBRARY ENDOWMENT FUND (1955) Established by Mrs. Don Wallace of New York City as a memorial tribute to her parents, the income to be used for the purchase of books in the field of the humanities.

BECKERMAN FAMILY ENDOWMENT FUND (1949) Established by Mr. and Mrs. Frank Beckerman of Newton, and Mrs. Louis Beckerman of Brookline, Massachusetts, the income of which will be used for a purpose to be determined at a later date by the donors.

JENNIE AND LOUIS BERMAN MEMORIAL FUND (1957) Established under the terms of the Will of Louis Berman of Lawrence, Massachusetts, the income to be used for library purposes.

GEORGE AND CHARLOTTE FINE ENDOWMENT FUND (1960) The income is to be used to support and supplement the chamber music concert programs given under the auspices and direction of the Department of Music at Brandeis University by providing for the employment of visiting artists in at least two of the major concerts given by the performing faculty each year.

FORD FOUNDATION ENDOWMENT FUND (1956) An allocation of \$530,500 the income of which is to be used for ten years to augment faculty salaries. At the end of the decade the capital is to be disbursed at the discretion of the Board of Trustees. This endowment has been further augmented by a grant of \$329,000 which will be used to increase junior faculty salaries.

GLASS FAMILY ENDOWMENT FUND (1949) Established by Mr. and Mrs. Hyman S. Glass, Mr. and Mrs. Fred M. Glass, and Mr. George B. Glass of Newton, Massachusetts, the purpose of the income to be determined at a later date.

HYMAN COHEN FOUNDATION AND MR. AND MRS. EDWARD E. COHEN ENDOWMENT FUND (1948) Created by the Hyman Cohen Foundation and Mr. and Mrs. Edward E. Cohen of Boston, Massachusetts, to support medical research.

ROSE AND JOHN DRUKER ENDOWMENT FUND (1956) Established in honor of Mr. John Druker of Boston, Massachusetts, on his 70th birthday by his wife and children. The income to be used for books and periodicals for the Science Library, with special reference to the health sciences and geriatrics.

FELDMAN FAMILY ENDOWMENT FUND (1949) Contributed by Mr. and Mrs. Frank Feldman, Mr. and Mrs. Philip Feldman, Mr. and Mrs. Joseph Feldman of Newton, Mrs. Albert Feldman and the late Albert Feldman of Brookline, Massachusetts, to be designated at a future date.

APPENDIX

SARAH AND HARRY GRANOFSKY AND ANNA AND ISAAC LERMAN ENDOWMENT FUND (1949) Established by Mr. and Mrs. Harry Granofsky and Mr. and Mr. Isaac Lerman of Boston, Massachusetts.

HAYM SALOMAN LODGE #1213, B'NAI B'RITH ENDOWMENT FUND (1952) Established by this Lodge of Boston, Massachusetts, through Mr. Benjamin J. Schoolman, Chairman of the Trustees Fund, the income to be used for library purposes.

FLORENCE HELLER ENDOWMENT FUND (1960) Established by Mrs. Florence Heller, the income of which shall be utilized for the support and expansion of the Florence Heller School for Advanced Studies in Social Welfare.

JOSEPH HOLTZMAN AND NATHAN SILVERMAN ENDOWMENT FUND (1960) Established by Messrs. Joseph Holtzman and Nathan Silverman of Detroit, Michigan.

ANNA WASSERMAN LOWENBERG FUND (1949) A memorial fund established by the Wasserman Charitable Foundation of Cambridge, Massachusetts, the income to be used to defray the cost of teaching or equipment in the premedical field or in the field of science.

DR. ABRAM L. SACHAR BIRTHDAY ENDOWMENT (1959) Created by the official family of the University and many friends to honor the President's 60th birthday. Presently, to be used for scholarship assistance and its ultimate designation to be at the discretion of Dr. Sachar and the Board of Trustees.

ALEXANDER L. AND FANNIE B. SHLUGER ENDOWMENT FUND (1954) Established through the Will of Mrs. Fannie B. Shluger of New York City, the income to provide lectures in the area of the social sciences.

SOLAR FAMILY ENDOWMENT FUND (1949) Created by Mr. and Mrs. Hervey L. Solar of Brookline, Massachusetts, to be designated for a specific purpose at a later date.

ESTHER SPEAR ENDOWMENT FUND (1952) Established by Mrs. Alfred Spear of Providence, Rhode Island, the income to be used by the University at its discretion.

JENNIE AND HERMAN VERSHBOW LIBRARY FUND (1949) Established by Mr. and Mrs. Herman Vershbow of Brookline, Massachusetts, the income to be used for library purposes.

JACOB ZISKIND ENDOWMENT FUND (1954) The income from this fund, which was created by a \$500,000 grant under the Will of Jacob Ziskind of Fall River, Massachusetts, will provide for the establishment and support in perpetuity of the Jacob Ziskind Professorships. In order that the intellectual life of the University may profit from the continuous stimulation of fresh ideas and viewpoints, each year invitations will be extended to distinguished scholars to join the arts and sciences faculty for a single academic year. Support is also to be provided each year for a series of lectures on a unified theme.

APPENDIX III

Chairs

- RITA H. ARONSTAM CHAIR IN CHEMISTRY (1950)** Established by the Rita H. Aronstam Charitable and Educational Foundation of Atlanta, Georgia, to support instruction in the field of chemistry.
- ATRAN FOUNDATION CHAIR IN LABOR ECONOMICS (1956)** Established by the Atran Foundation of New York City, to support instruction in the field of labor economics.
- JAMES AND ETTA AXELROD CHAIR IN MENTAL HEALTH (1959)** Established by a founding family of Brandeis University, in the School for Advanced Studies in Social Welfare, to encourage teaching and research in the area of mental retardation.
- CHARLES BASSINE CHAIR IN PHILOSOPHY (1960)** Established by Mr. Charles Bassine of New York City, to underwrite teaching and research in the area of philosophy.
- JACOB D. BERG CHAIR IN YIDDISH CULTURE (1959)** A trust fund established by the Jacob D. Berg Foundation of New York City, to subsidize the teaching of Yiddish language and culture.
- BUFFALO CHAIR IN PHYSICS (1954)** Established by friends of the University in Buffalo, New York, to support instruction in the field of physics.
- ABRAHAM S. AND GERTRUDE BURG CHAIR IN MICROBIOLOGY (1958)** An endowment which will underwrite in perpetuity a Chair in one of the life sciences, established by Mr. and Mrs. Abraham S. Burg of Swampscott, Massachusetts.
- HARRY COPLAN CHAIR IN THE SOCIAL SCIENCES (1959)** Established by devoted friends and associates in the furniture industry as a tribute to a deeply respected colleague, Harry Coplan of Baltimore, Maryland.
- RABBI ABRAHAM JOSEPH AND LEAH FACTOR CHAIR IN JUDAIC STUDIES (1959)** Established by Mr. and Mrs. John Factor of Beverly Hills, California in loving tribute to Mr. Factor's late mother and father, to subsidize teaching in Judaic studies.
- HENRY F. FISCHBACH CHAIR IN SCIENCE (1959)** Established by the family and friends of Mr. Henry F. Fischbach of New York City, the income from the endowment to subsidize a worthy incumbent for teaching and research in the area of the sciences.
- THE JOSEPH C. FOSTER CHAIR IN JUDAIC STUDIES (1961)** Established by Joseph C. Foster of Leominster, Massachusetts, as an endowment whose income subsidizes a Chair in Judaic Studies at the University.
- PINCUS GLICKMAN CHAIR IN JUDAIC STUDIES (1957)** An endowment established by Mr. Louis Glickman of New York City in memory of his father, and augmented through gifts of friends and associates.

APPENDIX

- MAURICE B. HEXTER CHAIR IN AMERICAN PHILANTHROPY (1961)** Established by the friends and associates of Dr. Maurice B. Hexter of New York, in tribute to his long career of public service and Jewish communal leadership.
- MORRIS HILLQUIT CHAIR IN LABOR AND SOCIAL THOUGHT (1957)** An endowment established to honor the notable contributions of Morris Hillquit to the Labor movement. Initiated by the Reunion of Old Timers, and established by the International Ladies' Garment Workers' Union, with participation by the William Green Memorial Fund and other trade unions and individuals.
- MILTON KAHN CHAIR IN COMMUNITY ORGANIZATION (1960)** Established through contributions by hundreds of friends and admirers of a distinguished Brandeis community leader, and member of Brandeis' Board of Trustees, in tribute to a lifetime of leadership.
- ARTHUR D. KATCHER AND BENJAMIN LEIBEL CHAIR IN SOCIAL SERVICE (1959)** Established by the Jewish Settlement House in New York City, for a Chair in the Graduate School for Advanced Studies in Social Welfare in honor of Benjamin Leibel and in memory of the late Arthur D. Katcher.
- MORTIMER GRYZMISH CHAIR IN HUMAN RELATIONS (1952)** Established by Mr. Mortimer Gryzmish of Boston, Massachusetts, to stimulate objective research and instruction in the problems of group conflict.
- HENRY NELSON HART CHAIR IN PHYSICS (1956)** Established by Mr. Henry N. Hart of Chicago, Illinois, to support instruction in the field of physics.
- ISRAEL AND SARAH HARTFIELD CHAIR IN JUDAIC STUDIES (1959)** Established by Mr. and Mrs. Leo Hartfield of Beverly Hills, California in loving tribute to Mr. Hartfield's late mother and father, to subsidize teaching in Judaic studies.
- KAUFMANN CHAIR IN THE SOCIAL SCIENCES (1951)** Established by Messrs. Cecil and Joel Kaufmann of Washington, D. C., to support the teaching program in the social sciences.
- THE LEFF CHAIR IN HISTORY (1961)** Established by Phillip and Lillian Leff, and Carl and Eleanor Leff of New York City, as an annual subvention to subsidize a Chair in History at the University.
- SAMUEL AND LUCILLE LEMBERG CHAIR IN BIBLICAL STUDIES (1961)** Established by Samuel and Lucille Lemberg of New York to subsidize a gifted incumbent who has made the Bible his special field of study.
- B. E. AND REGINE S. LEVY CHAIR IN FRENCH CIVILIZATION (1957)** Established by the Charles of the Ritz Foundation to honor the memory of Mr. and Mrs. Benjamin E. Levy of Ridgefield, Connecticut. An annual subvention to support a distinguished authority in the area of French language and literature.
- PHILIP W. LOWN CHAIR IN JUDAIC STUDIES (1955)** Established by Mr. Philip W. Lown of Boston, Massachusetts, to support instruction in the field of Judaic studies.
- NATHAN MANILOW CHAIR IN COMMUNITY PLANNING (1956)** A grant of \$100,000 to strengthen the area of sociology so that enlarged provision can be made for the study of community and regional planning. Established in honor of Mr. Nathan Manilow of Park Forest, Illinois, by his associates, America Community Builders, Inc.

APPENDIX

- FREDRIC R. MANN CHAIR IN MUSIC (1953)** Established by Mr. Fredric R. Mann of Philadelphia, Pennsylvania, in memory of William Kapell, to support instruction in music.
- WALTER W. NAUMBURG CHAIR IN MUSIC (1959)** Established through a bequest from the Estate of Walter W. Naumburg of New York City, a first cousin of Mrs. Louis D. Brandeis, to support study and research in the field of music.
- MAX RICHTER CHAIR IN POLITICAL SCIENCE (1949)** An endowment fund established by the directors of the Richter Memorial Foundation, under the terms of the Will of Max Richter of New York City, to support instruction in political science, and especially in international affairs.
- JULIUS M. ROGOFF CHAIR IN PHYSIOLOGY (1953)** An annual subvention from a fund of \$50,000, established by the Rogoff Foundation of Belle Island, Connecticut, to maintain instructors, research and laboratory development in the field of physiology.
- SAMUEL RUBIN CHAIR IN ANTHROPOLOGY (1951)** Established by the Board of Trustees in accordance with the terms of an annual grant from Mr. Samuel Rubin of New York City.
- HELENA RUBINSTEIN CHAIR IN CHEMISTRY (1956)** Established by Madame Helena Rubinstein of New York City, to support instruction in the field of chemistry.
- MORRIS SCHAPIRO AND FAMILY FOUNDATION CHAIR IN SCIENCE (1956)** Established by the Morris Schapiro and Family Foundation of Baltimore, Maryland, to support instruction in the areas of science.
- JOHN STEIN CHAIR IN HUMAN REHABILITATION (1961)** Established by Misses Katie, Laura and Harriet Stein of Fort Worth and New York in loving memory of their brother John, to support teaching and research programs in Human Rehabilitation in the School for Advanced Studies in Social Welfare.
- HARRY S. TRUMAN CHAIR IN AMERICAN CIVILIZATION (1958)** An endowment whose income supports a distinguished incumbent, made possible by the birthday contributions of friends and admirers of the former President of the United States.
- MICHAEL TUCH CHAIR IN HEBREW LITERATURE AND ETHICS (1950)** Established by the Michael Tuch Foundation of New York City, to maintain instruction and research in the field of Hebrew letters.
- SOPHIE TUCKER CHAIR IN THE THEATRE ARTS (1955)** Established by Miss Sophie Tucker of New York City, to support instruction in the field of theatre arts.
- EARL WARREN CHAIR IN AMERICAN CONSTITUTIONAL STUDIES (1956)** Established in honor of the Chief Justice of the United States by a group of admirers in California, headed by Mr. Benjamin H. Swig of San Francisco, to support instruction in the field of American constitutional studies.
- HARRY AUSTRYN WOLFSON CHAIR IN PHILOSOPHY (1957)** Established by Mr. Erwin S. Wolfson of New York City to honor his distinguished kinsman, one of the most creative and original minds of our times. An endowment of \$250,000 the income of which, in perpetuity, is to provide the salary of appointments to the Chair.

APPENDIX

PETER AND ELIZABETH WOLKENSTEIN CHAIR IN THE HUMANITIES (1956) Established by Mr. David Borowitz of Chicago, Illinois, in memory of the parents of the late Anne Wolkenstein Borowitz, to support instruction in the field of the humanities.

JAMES HENRY YALEM CHAIR IN ECONOMICS (1951) Established by Mr. and Mrs. Charles Yalem of Clayton, Missouri, as a memorial to their son, to support instruction in the field of economics.

YOUNG MEN'S PHILANTHROPIC LEAGUE CHAIR IN GERONTOLOGY (1960) Established by the Young Men's Philanthropic League of New York City through annual allocations, to support the teaching and research programs in gerontology in the School for Advanced Studies in Social Welfare.

APPENDIX IV

Faculty Supplementary Grants

- EQUITABLE LIFE ASSURANCE SOCIETY FACULTY SUPPLEMENTATION (1957) An annual grant under the Equitable Society's Plan for the Support of Higher Education to strengthen the salary structure of the teaching faculty.
- FOHS FOUNDATION FACULTY SUPPLEMENTATION IN SCIENCE (1956) An annual grant from the Fohs Foundation of Houston, Texas, to strengthen the salary structure of the teaching faculty in the science areas.
- M. BRENN GREEN FACULTY SUPPLEMENTATION IN PSYCHOLOGY (1958) A five-year grant from Mr. M. Brenn Green of New York City to strengthen the salary structure in the graduate area of psychology.
- MORRIS N. LANDAU FACULTY SUPPLEMENTATION IN NEAR EASTERN AND JUDAIC STUDIES (1957) A contribution from Mr. William Landau of Harrison, New York, of \$2,000 annually for five years to strengthen the salary structure in the graduate area of Near Eastern and Judaic studies.
- SENATOR HERBERT H. LEHMAN FACULTY SUPPLEMENTATION IN POLITICAL SCIENCE (1958) A contribution from the Honorable Herbert H. Lehman of New York City to strengthen the salary structure in the graduate area of political science.
- I. NORMAN LEVIN FUND (1960) Set up out of the estate of the late I. Norman Levin for the advancement of teaching, scholarship, and research purposes as authorized by the Brandeis University Board of Trustees.
- EMANUEL P. LEWIS FACULTY SUPPLEMENTATION GRANT (1961) Established for a five-year period by Mr. Emanuel P. Lewis of New York City, to help strengthen faculty standards through supplementation of faculty salaries.
- NORMAN MORRIS SUPPLEMENTATION FUND (1961) Established over a five year period to help strengthen faculty standards through supplementation of faculty salaries.
- JACOB S. POTOFSKY FACULTY SUPPLEMENTATION IN ECONOMICS (1953) Established in honor of Mr. Jacob S. Potofsky of New York City by his devoted colleagues of the Amalgamated Clothing Workers of America and his other associates to support instruction in the field of economics.
- HAROLD L. RENFIELD FACULTY SUPPLEMENTATION GRANT (1961) Established by the Joseph H. Renfield Charitable Trust of New York City to enlarge the opportunities of distinguished faculty people on the Brandeis campus.
- CHESTER H. ROTH FACULTY SUPPLEMENTATION IN THE HISTORY OF IDEAS (1957). A contribution from Mr. Chester H. Roth of New York City of \$2,000 annually for five years to strengthen the salary structure in the graduate area of the history of ideas. Further augmented at a University function honoring Chester Roth by his friends and admirers.
- DR. RAYMOND H. SCHNEIDER FACULTY SUPPLEMENTATION IN CHEMISTRY (1957) A contribution from Dr. Raymond H. Schneider of New York City of \$2,000 annually for five years to strengthen the salary structure in the graduate area of chemistry.
- I. M. WEINSTEIN FACULTY SUPPLEMENTATION IN HUMAN RELATIONS (1954) Established by Messrs. A. J. Weinberg and Joseph Jacobs of Atlanta, Georgia, in memory of their colleague, I. M. Weinstein, to stimulate the study of prejudice and intolerance and the techniques which may minimize social friction.

APPENDIX V

Fellowships

MAXWELL AND FANNIE ABBELL TEACHING FELLOWSHIP IN JUDAIC STUDIES (1954) Created by the late Maxwell Abbell of Chicago, Illinois, to support a teaching fellowship in the field of Judaic studies.

EDWARD E. ALLEN MEMORIAL FELLOWSHIP ENDOWMENT FUND (1959) Established by the family of the late Edward E. Allen of Boston, Massachusetts, and the Massachusetts Association for Retarded Children with a foundation grant of \$10,000.00. The income to be used to subsidize fellowship assistance for graduate students in the School for Advanced Studies in Social Welfare, who are concentrating in the field of mental health.

ALPHA EPSILON PHI SORORITY FOUNDATION FELLOWSHIP (1959) Established in honorary tribute to the Founders of this Sorority, for fellowship subsidy in the School for Advanced Studies in Social Welfare.

ALLAN I. BLUESTEIN FELLOWSHIP (1960) Established by Allan I. Bluestein through the Jacob Bluestein Foundation, Inc. of New York, to assist deserving students in the field of the humanities, particularly in literature, history and language.

JACOB AND RACHEL BLUESTEIN MEMORIAL FELLOWSHIP (1960) Established by Allan I. Bluestein through the Jacob Bluestein Foundation, Inc. of New York, in memory of his parents, to assist gifted students in the field of the humanities.

MORRIS BURG TEACHING FELLOWSHIP (1957) Established by Mrs. Mildred H. Burg of Brookline, Massachusetts, in memorial tribute to her husband, to support a teaching fellowship in the area of human relations.

CAMPBELL SOUP FELLOWSHIP (1961) Four tuition fellowships established by Campbell Soup Co. as part of its Aid to Education Program and assigned to gifted students in the Florence Heller School for Advanced Studies in Social Welfare.

EDDIE CANTOR FELLOWSHIP (1958) Two fellowships established by Mr. Eddie Fisher of New York City and Hollywood, California, in honor of his friend and patron, Eddie Cantor, one for full maintenance and the other an annual tuition fellowship for four years, open to students primarily interested in classical music.

DORA K. COHN FELLOWSHIP IN SOCIAL WELFARE (1959) Set up as a memorial by Mr. Ruby P. Cohn of St. Louis, Missouri, to subsidize graduate study in the School for Advanced Studies in Social Welfare.

COMBINED JEWISH APPEAL OF GREATER BOSTON-ASSOCIATED JEWISH PHILANTHROPIES FELLOWSHIP (1959) A \$5,000 fellowship to be awarded to a student pursuing graduate work in social welfare.

LEON J. COSLOV FELLOWSHIP (1957) Established by Mr. Leon J. Coslov of Glassport, Pennsylvania, to support a teaching fellowship.

APPENDIX

DAN DANCIGER GRADUATE FELLOWSHIP TRUST FUND (1958) Established through a \$250,000 bequest from the estate of the late Dan Danciger of Fort Worth, Texas, to provide fellowship assistance for graduate students of outstanding academic potential to enable them to pursue academic careers regardless of financial limitations.

IDA AND MARK A. EDISON TEACHING FELLOWSHIP (1955) Established as a memorial to Ida and Mark A. Edison by the Shapiro Brothers of Auburn, Maine, to support a teaching fellowship.

ESSO EDUCATION FOUNDATION TEACHING FELLOWSHIP (1956) A grant from the Esso Education Foundation of Standard Oil Company (New Jersey), assigned as a teaching fellowship, to assist in the undergraduate educational program.

M. B. AND FANNIE FINKELSTEIN FOUNDATION RESEARCH FELLOWSHIP GRANT (1961) Established by the trustees of the M. B. and Fannie Finkelstein Foundation of Houston, Texas, to help subsidize an outstanding student who wishes to go into graduate research work.

GENERAL FOODS FUND FELLOWSHIP GRANT (1961) Established by the General Foods Fund, Inc., for fellowship assistance to outstanding graduate students who are concentrating in the area of the Life Sciences.

GILLETTE GRADUATE TEACHING FELLOWSHIP (1961) Established by the Gillette Company of Boston, Massachusetts, for an annual graduate teaching fellowship at the University.

HARRY AND ELKA GITLOW FELLOWSHIP ENDOWMENT IN HUMANISTIC STUDIES (1959) Established by Mr. Albert Gitlow of New York City and members of the family as a memorial tribute.

HERMAN GOLANTY MEMORIAL FELLOWSHIP (1956) Established by Mr. George C. Golanty of Detroit, Michigan.

ALEXANDER GOLDSTEIN TEACHING FELLOWSHIP IN SOCIAL SCIENCE (1950) The income from this \$25,000 fund will be used to support a teaching fellowship in the field of social science. Established as a memorial to her brother by the late Miss Lutie Goldstein of San Francisco, California.

EDWARD GOLDSTEIN TEACHING FELLOWSHIP (1954) A grant from Mr. Edward Goldstein of Boston, Massachusetts, to support a teaching fellowship.

ANNA C. GREENSTONE MEMORIAL FELLOWSHIP (1952) Established by her children, Mr. Charles R. Greenstone of San Francisco, California, Mr. Stanford M. Green of Livermore, California, and Mrs. Simon Rubin of New Bedford, Massachusetts.

GULF OIL CORPORATION FELLOWSHIP (1959) A grant from the Gulf Oil Corporation's Aid to Education Program, to be assigned for fellowship assistance in the School for Advanced Studies in Social Welfare.

APPENDIX

EDWARD HANO FELLOWSHIP ENDOWMENT (1958) The income from this fund is to provide supplementary fellowship assistance to gifted graduate students enrolled in the School for Advanced Studies in Social Welfare. A tribute to the late Edward Hano, of Granby, Massachusetts, by his wife and members of the family.

LOUIS H. HARRIS TEACHING FELLOWSHIP (1955) Established by Mrs. Max S. Hillson and the late Mr. Hillson of New York City, to support a teaching fellowship.

MINNIE HARRIS FUND (1960) A trust in the amount of \$150,000 set up by Mr. Joseph Harris of New York City, in memory of his mother, to be assigned over a 10 year period to gifted students, whether graduate or undergraduate who are planning their careers in the life sciences.

DR. MAURICE B. HEXTER FELLOWSHIP (1961) Established as a tribute to Dr. Maurice B. Hexter of New York City by his friends. This Fellowship is to be given to a deserving student at the Florence Heller School for Advanced Studies in Social Welfare.

EDDIE JACOBSON MEMORIAL FOUNDATION FELLOWSHIP (1957) Two fellowships in the amount of \$2,000 each for gifted students from Israel, who are preparing themselves at Brandeis University for a more effective career of service in the State of Israel. Established by friends of the late Eddie Jacobson of Kansas City, under the chairmanship of former President Truman and Mr. George Roth.

ROBERT E. AND HARRY A. KANGESSER FELLOWSHIP TRUST (1951) Established by Messrs. Robert E. and Harry A. Kangesser of Cleveland, Ohio, the income to be used for teaching fellowships.

LILLIAN KRATTER FELLOWSHIP (1961) Established in her honor by her husband, Mr. Marvin Kratter of New York City, to be assigned to a female student concentrating in the Graduate School of Music.

MARVIN KRATTER FELLOWSHIP (1961) Established in his honor by his wife, Mrs. Lillian Kratter of New York City, to be assigned to a male student concentrating in the Graduate Area of Biology.

IDA S. LATZ FOUNDATION FELLOWSHIP (1959) Established by this Foundation to make available a fellowship to a disabled veteran for study at the School for Advanced Studies in Social Welfare.

LCK FELLOWSHIP IN SOCIAL SCIENCE (1957) Established by an anonymous friend of the University to support a fellowship in the area of the social sciences, with preference in the field of economics.

SAMUEL AND LUCILLE LEMBERG FELLOWSHIP ENDOWMENT (1960) Established by Mr. Samuel Lemberg of New York City in memory of his parents to provide a fellowship subsidy to a gifted advanced student in the area of psychology.

LEVINSON TEACHING FELLOWSHIP IN BIOLOGY (1951) Established by the James and Rachel Levinson Foundation of Pittsburgh, Pennsylvania.

APPENDIX

DR. MENO LISSAUER TEACHING FELLOWSHIP IN NATURAL SCIENCE (1957) Set up through a major gift by the late Dr. Meno Lissauer of New York City and the birthday tributes of his colleagues in the Metals and Mining Industry.

THEODORE ROOSEVELT MCKELDIN FELLOWSHIP (1957) Established by friends of former Governor McKeldin of Maryland as a tribute to him. To be used to subsidize gifted graduate students who plan to concentrate in the areas of political science and government.

ABRAHAM MENDELOWITZ FELLOWSHIP ENDOWMENT FUND (1959) Established by the Millinery Workers Health and Welfare Fund in honor of Mr. Abraham Mendelowitz of New York City on the occasion of his 65th birthday. To subsidize outstanding scholars so that they may continue their studies and medical research in biochemistry and microbiology.

THE MERRILL FOUNDATION FELLOWSHIPS (1960) Established by a gift from the Charles E. Merrill Trust, to encourage gifted scholars in the study of all aspects of Jewish life, and develop Jewish community leadership, scholarship and teaching, especially on the University level.

DAVID K. NILES TEACHING FELLOWSHIP IN AMERICAN GOVERNMENT (1957) To be assigned in memory of a Trustee of the University, who served with distinction as administrative assistant to President Roosevelt and President Truman, for a worthy graduate student who plans for a career in American government service.

LILLIAN PERSKY PALAIS ENDOWMENT (1960) Established by Mr. and Mrs. Abraham S. Persky of Worcester, Massachusetts, in memory of Mr. Persky's sister, as an endowment whose income in perpetuity is to subsidize the tuition of gifted graduate students so that they may complete their science training.

MAURICE POLLACK FOUNDATION RESEARCH FELLOWSHIP (1956) Established by the Maurice Pollack Foundation of Quebec, Canada, to enable gifted graduate students to pursue research programs in the field of Judaic studies.

BERTHA C. REISS MEMORIAL FELLOWSHIP ENDOWMENT FUND (1955) Created by the late Dr. Henry Reiss of New York City for the establishment of the Bertha C. Reiss Memorial Fellowship or teaching fellowships. Awards to be made to students on the basis of their accomplishments in the field of research and/or teaching.

BENJAMIN ROSENBERG TEACHING FELLOWSHIP ENDOWMENT (1959) Established as a memorial tribute by Mr. and Mrs. Joseph Rosenberg of Fox Point, Wisconsin, to support a teaching fellowship in the field of Polymer Chemistry.

THE LEO L. ROSENHIRSCH MEMORIAL FELLOWSHIP FUND (1961) Established by Mr. Alfred E. Rosenhirsch and Mrs. Hilda Nussenfeld of New York City to help cover tuition and other expenditures for gifted and needy graduate students.

APPENDIX

- EDWIN M. ROSENTHAL TEACHING FELLOWSHIP IN THE LIFE SCIENCES (1961)** Established to honor the 82nd birthday of Edwin A. Rosenthal of Hollywood, Florida, by his daughter Mrs. Hoke Levin of Detroit, Michigan, to be assigned as a teaching fellowship for a graduate student concentrating in the Life Sciences.
- JULIUS ROSENWALD TEACHING FELLOWSHIPS (1952)** A series of teaching fellowships in memory of the distinguished philanthropist, Julius Rosenwald, established by his daughter, Mrs. Adele Rosenwald Levy, to subsidize the development and teaching of gifted graduate students.
- DR. VERA RUBIN FELLOWSHIP (1960)** Established by Dr. Vera Rubin of New York City for a fellowship in the field of anthropology.
- ABRAM L. SACHAR FELLOWSHIP (1961)** Established by B'nai B'rith in honor of the Honorary Chairman of the National Hillel Commission, to underwrite part of the expenses for a gifted student at Brandeis University who joins the Hiatt Institute in Israel to strengthen background in Israeli Studies.
- ISRAEL SACHS TEACHING FELLOWSHIP IN SOCIAL RELATIONS (1952)** Established by his wife and children in his memory.
- SAMUEL AND RAE SALNY FELLOWSHIP ENDOWMENT IN SOCIAL RELATIONS (1952)** Established by Mrs. Samuel M. Salny and the late Mr. Salny of Boston, Massachusetts, the income to support a fellowship in the field of social relations.
- DAVID SARNOFF FELLOWSHIP (1959)** Established by the RCA Education Committee to subsidize a gifted and needy student in the University's graduate program in physics.
- SAMUEL D. AND GOLDIE SAXE FELLOWSHIP IN SCIENCE (1955)** Established by Mrs. Goldie Saxe of Brookline, Massachusetts, and children, to support research and teacher training in the field of science.
- EDWARD A. SCHAFFER TEACHING FELLOWSHIP ENDOWMENT (1959)** Established by Mrs. Edward A. Schaffer of Longmeadow, Massachusetts, in memorial tribute to her husband, to support a teaching fellowship in the field of humanistic and social sciences.
- RABBI SOLOMON SCHEINFELD FELLOWSHIP ENDOWMENT (1959)** Established by the Sylvia and Aaron Scheinfeld Foundation of Chicago, Illinois as a memorial tribute to Mr. Scheinfeld's distinguished father. The income to be used for fellowship assistance to gifted graduate students, preferably from greater Milwaukee or Wisconsin, in the School for Advanced Studies in Social Welfare.
- S. H. SCHEUER FELLOWSHIP (1960)** Established in the School for Advanced Studies in Social Welfare to subsidize the doctoral preparation of a gifted student enrolled in the School.
- IDA HILLSON SCHWARTZ AND ELIAS EDWARD SCHWARTZ MEMORIAL FELLOWSHIP ENDOWMENT FUND (1949)** Established as a memorial to Ida Hillson Schwartz of Winter Hill, Massachusetts, by her family. The fund has been augmented by a bequest from the Estate of Elias Edward Schwartz. The income to be used in perpetuity as an exchange fellowship, either to bring gifted young people from Israel to Brandeis University or to send Brandeis University students to the Hebrew University in Israel.

APPENDIX

KURT AND HORTENSE SCHWEITZER TEACHING FELLOWSHIP IN AMERICAN CIVILIZATION (1951) A grant from Mr. and Mrs. Kurt Schweitzer of Oklahoma City, Oklahoma, to support a teaching fellowship in the field of American civilization.

MORRIS SEPINUCK TEACHING FELLOWSHIP (1954) Created as a memorial to Morris Sepinuck by his children, Messrs. Samuel and Nathan Sepinuck, and Mrs. George Sorkin of Boston, Massachusetts.

ISAIAH LEO SHARFMAN TEACHING FELLOWSHIP ENDOWMENT (1956) Established by Mr. and Mrs. Samuel R. Rosenthal of Highland Park, Illinois, in tribute to Professor Sharfman of the University of Michigan, with preference given to teaching fellows in the area of economics.

MONA BRONFMAN SHECKMAN MEMORIAL TEACHING FELLOWSHIP (1952) A grant from the Mona Bronfman Sheckman Memorial Foundation of New York City, to support a teaching fellowship.

MR. AND MRS. HARRY STADLER TEACHING FELLOWSHIP IN MUSIC (1956) Established by Mr. and Mrs. Harry Stadler of Hollywood, Florida, in memory of their loving mothers, Sarah Stadler and Etta Berger, to support a teaching fellowship in the field of music.

JOSEPH F. STEIN FOUNDATION, INC. FELLOWSHIP (1959) Established by the Joseph F. Stein Foundation, Inc. through Mr. Joseph F. Stein of New York City, for fellowship study in the School for Advanced Studies in Social Welfare.

GERTRUDE W. AND EDWARD M. SWARTZ FELLOWSHIP ENDOWMENT FUND (1954) Established by Mr. and Mrs. Edward M. Swartz of Brookline, Massachusetts, to support a teaching or research fellowship.

DAVID TANNENBAUM TEACHING FELLOWSHIP IN LEGAL INSTITUTIONS (1958) An endowment to honor the memory of David Tannenbaum of Beverly Hills, California, established by his friends and admirers.

TANSON ENTERPRISES INC. FELLOWSHIP (1961) A fellowship set up by Tanson Enterprises, Inc., to subsidize the graduate training of an outstanding student in the School of Advanced Studies of Social Welfare.

BEN TOBIN TEACHING FELLOWSHIP (1955) Established by Mr. Ben Tobin of Hollywood, Florida, to support a fellowship in the field of science.

UNIVERSAL MATCH FOUNDATION FELLOWSHIP (1957) A stipend of \$3600 to be awarded to a graduate student, or students, who are concentrating in the fields of physics, chemistry, biochemistry or microbiology, set up by the Universal Match Foundation of St. Louis, Missouri.

ABRAHAM AND SARAH WEISBERG ENDOWMENT (1960) This income to be used to support a graduate student or young faculty member to offer counsel to Brandeis students who are engaged in editing and managing the student publications.

APPENDIX

HERMAN WEISSELBERG MEMORIAL FELLOWSHIP (1957) Established as a memorial tribute by Mr. Arnold Weisselberg of Long Island City, New York, to support a fellowship.

CARRIE WIENER TEACHING FELLOWSHIP (1950) The income from this \$25,000 fund is to be used for a fellowship, established by Mr. Herman Wiener of Toledo, Ohio, in the name of his wife.

LEON G. WINKELMAN FELLOWSHIP ENDOWMENT FUND (1959) Established by the Leon G. and Josephine Winkelman Foundation of Detroit, Michigan as a memorial tribute of Leon G. Winkelman, to subsidize a graduate fellowship in the field of gerontology.

BENJAMIN YEAGER TEACHING FELLOWSHIP (1952) Established by Mr. Benjamin Yeager of Sullivan County, New York, for a teaching fellowship.

APPENDIX VI

Scholarship Endowment Funds

- AMELIA K. ACKERMAN ENDOWMENT FUND (1954) Established in memory of their mother by Messrs. Max H., Abraham B., and Myron H. Ackerman of New York City, and Mrs. Stella A. Yarvin of Springfield Gardens, Long Island. The income to be used for tuition scholarship aid for a gifted and deserving student who might otherwise be unable to have the advantage of a college education.
- AMELIA K. ACKERMAN SCHOLARSHIP ENDOWMENT FUND (1954) Established by Mr. and Mrs. Myron H. Ackerman of New York City in memory of his mother. The income to be used as scholarship aid for a gifted and deserving student who might otherwise be unable to have the advantage of a college education.
- FLORENCE M. AGOOS SCHOLARSHIP ENDOWMENT FUND (1952) Established by the Estates of Florence M. and Solomon Agoos of Boston, Massachusetts, the income to be used for scholarships for Catholic, Protestant and Jewish students.
- SAUL ALEXANDER FOUNDATION SCHOLARSHIP ENDOWMENT FUND (1957) Established by the Trustees of the Saul Alexander Foundation of Charleston, South Carolina, as a memorial tribute to Mr. Saul Alexander. The income, supplemented by a further grant, will be used for scholarship purposes.
- BERT ALLENBERG SCHOLARSHIP ENDOWMENT FUND (1959) Created by the Suisman Foundation, Inc., of Hartford, Connecticut, in memorial tribute to Mr. Bert Allenberg of Beverly Hills, California, to provide scholarship help to a worthy student.
- DAVID A. AND ELEANOR ARANSKY SCHOLARSHIP ENDOWMENT (1960) Established by David A. and Eleanor Aransky of Newton, Massachusetts, the income will provide tuition assistance for gifted and needy students.
- BERTHA ARONSON SCHOLARSHIP ENDOWMENT FUND (1957) Established by Mr. Henry Aronson of Brookline, Massachusetts, in memory of his beloved wife, the income will provide tuition assistance for gifted and needy students.
- TOMMY ATKINS SCHOLARSHIP ENDOWMENT FUND (1959) Created through memorial tributes from the family and friends of the late Tommy Atkins of Los Angeles, California. The income from this fund will be used for scholarship aid to gifted and needy students majoring in the social sciences.
- SEYMOUR ISRAEL BAROWSKY SCHOLARSHIP ENDOWMENT FUND (1958) Established by Mr. and Mrs. Jacob L. Barowsky of Holyoke, Massachusetts, in memory of their beloved son, to provide scholarship assistance for a worthy and needy student, with preference to a student from the Holyoke area; if none available, assignment is to be made at the discretion of the Scholarship Committee.

APPENDIX

- MR. AND MRS. JULIUS BARON SCHOLARSHIP ENDOWMENT FUND (1960)** Established in honor of Mr. Julius Baron's 70th birthday by his children Mr. and Mrs. Eli Baron of Newton Centre, Mr. and Mrs. Irving Baron, and Mrs. Leon I. Shapiro of Brookline, Massachusetts, to provide tuition assistance to a worthy and deserving student. Further augmented by tributes from family and friends.
- TAMARA AND JACOB BAXT SCHOLARSHIP ENDOWMENT FUND (1957)** Established by Mrs. Jacob Baxt of New York City, as a memorial tribute to her husband. The income will provide a tuition scholarship for a gifted, deserving student, majoring in pure science or mathematics, regardless of race, creed or color, who could not otherwise enjoy a college education.
- ABRAM J. BERKWITZ SCHOLARSHIP ENDOWMENT FUND (1956)** A fund of \$5,000 established by Mr. Abram J. Berkwitz of Brookline, Massachusetts, the income will provide scholarship assistance for worthy and needy students of the Catholic, Protestant and Jewish faiths.
- LEON BIRNBAUM SCHOLARSHIP ENDOWMENT FUND (1958)** Established by the family and associates of Mr. Leon Birnbaum of New York City, in honor of his 70th birthday. The initial grant will be periodically augmented, and the income is to be supplemented by the donors, if necessary, to provide scholarship assistance for deserving students.
- FRIEDA AND BENJAMIN BITTAN SCHOLARSHIP ENDOWMENT FUND (1956)** Established by Mr. D. R. Bittan of Lawrence, Long Island, New York, in memory of his parents, the income will provide tuition assistance for gifted and needy students.
- CORA BLOCK SCHOLARSHIP ENDOWMENT FUND (1956)** An endowment fund of \$20,000 established by Mrs. L. E. Block of Chicago, Illinois, the income will provide tuition assistance to a gifted and needy student. Preference is to be given each year to students who have been victims of tyranny in other lands.
- BOSTON SPIRIT LODGE #1968 B'NAI B'RITH SCHOLARSHIP ENDOWMENT FUND (1959)** Established by members of the Boston Spirit Lodge. The income from this fund will provide tuition assistance to a worthy and deserving boy or girl.
- MORRIS AND BESSIE BRAFF SCHOLARSHIP ENDOWMENT FUND (1952)** The income from this fund established by Mr. and Mrs. Morris Braff of Boston, Massachusetts, to be used for an annual scholarship to a deserving student.
- SELWYN I. AND TILLIE J. BRAUDY FUND (1960)** Established by Mr. Selwyn I. Braudy of New Bedford, Massachusetts, to provide scholarship assistance for a worthy and needy student.
- HARRIET AND ISAAC BRESLAV SCHOLARSHIP ENDOWMENT FUND (1958)** Established by Mr. Jack Breslav of New Haven, Connecticut, for scholarship aid to students, with preference to those from New Haven or Fairfield County, Connecticut.
- EVA AND NATHAN BREZNER SCHOLARSHIP ENDOWMENT FUND (1951)** Given by Mr. and Mrs. Nathan Brezner of Boston, Massachusetts, the income is to be used to finance one semester's tuition for a worthy student.

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- EDWARD BRODSKY SCHOLARSHIP ENDOWMENT FUND (1959)** Established under the terms of the Will of Edward Brodsky of Washington, D. C., the income to be used for scholarship assistance to needy students of high scholastic standing.
- MARTIN AND MARY BROWN SCHOLARSHIP ENDOWMENT FUND (1961)** Established by Mr. and Mrs. Martin Brown of Newton, Massachusetts, to honor the memory of his beloved brother, Joseph M. Brown. The income from this fund will provide tuition scholarship assistance to worthy and deserving students who demonstrate exemplary qualities of thoughtfulness and tolerance to people of all races and creeds.
- BRUKENFELD FAMILY FOUNDATION SCHOLARSHIP ENDOWMENT FUND (1953)** A fund of \$20,000 established in honor of the late Morris and Sarah Brukenfeld of New York City, the income to be used for aid to a deserving student.
- MORRIS BURG SCHOLARSHIP ENDOWMENT FUND (1957)** Established as a memorial tribute to his father-in-law by Mr. A. Raymond Tye of Boston, Massachusetts, the income will provide scholarship assistance to a gifted and needy student.
- MR. AND MRS. SAMUEL BURTMAN SCHOLARSHIP ENDOWMENT FUND (1954)** Established by Mr. and Mrs. Samuel Burtman of Detroit, Michigan, the income will provide scholarship assistance to a deserving student.
- SAMUEL L. AND FANNIE A. CALECHMAN SCHOLARSHIP ENDOWMENT FUND (1959)** Established by Mr. and Mrs. Samuel L. Calechman of New Haven, Connecticut, the income will provide tuition assistance to worthy and deserving students.
- SIDNEY CANNOLD SCHOLARSHIP ENDOWMENT FUND (1958)** Established by Mr. Sidney Cannold of Mamaroneck, New York, the income will provide maintenance and tuition assistance for gifted and needy students, with preference to those who plan for a career in engineering.
- RUHAMMAH FEINGOLD CATES MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1952)** Established by Mrs. Esther J. Edinburg of Worcester, Massachusetts, in memory of her sister, the income to be used for scholarship purposes.
- MAX AND HARRIET CHERNIS SCHOLARSHIP ENDOWMENT FUND (1956)** Established by Mr. and Mrs. Max Chernis of Newton, Massachusetts, in honor of their 47th wedding anniversary, and augmented by gifts in honor of their 50th wedding anniversary, the income to provide scholarship assistance for gifted and needy students.
- EDWARD COHEN OF CAMBRIDGE, MASSACHUSETTS, EXCHANGE STUDENT SCHOLARSHIP (1961)** Established under the Will of the late Edward Cohen, the income to be used to create a scholarship for exchange students from Brandeis University and from the Hebrew University and Haifa Technion in Israel.
- PHILIP AND BERNICE COLEMAN SCHOLARSHIP ENDOWMENT FUND (1956)** Established by Philip and Bernice Coleman of Boston, Massachusetts, the income to be used for the assistance of worthy and needy students.
- MORRIS COMESS SCHOLARSHIP ENDOWMENT FUND (1958)** Established by Mrs. Morris Comess of Sherman Oaks, California, as a memorial tribute to her beloved husband, the income will be used to assist a needy student majoring in pre-medical studies.

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- MR. AND MRS. HARRY S. COOPER SCHOLARSHIP ENDOWMENT FUND (1958) Established by Mr. and Mrs. Harry S. Cooper of Pacific Palisades, California, the income will provide tuition assistance for worthy students.
- HARRY B. DENNER SCHOLARSHIP ENDOWMENT FUND (1951) The income from this \$18,000 fund will provide a tuition scholarship for a gifted, deserving student who might otherwise be unable to have the advantage of a college education. Established by Mr. Harry B. Denner of New York City.
- MARY DENNER SCHOLARSHIP ENDOWMENT FUND (1956) Established by Mr. Harry B. Denner of New York City, in honor of his wife, Mary, the income will be used for scholarship assistance to worthy and deserving students.
- IRVING M. DICHTER MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1961) Established as a memorial tribute to Irving M. Dichter of Brookline, Massachusetts, by his family and friends. The income from this fund will be used to assist gifted and needy students majoring in the field of Mathematics.
- CAMILLE AND HENRY DREYFUS FOUNDATION, INC., SCHOLARSHIP ENDOWMENT FUND (1956) Established by the Camille and Henry Dreyfus Foundation, Inc., of New York City, the income to be used for scholarship assistance to students excelling in the fields of chemistry, chemical engineering or related sciences.
- FRANCIS N. EHRENBURG SCHOLARSHIP ENDOWMENT FUND (1956) Established by Mr. Francis N. Ehrenberg of New York City, to provide tuition assistance to worthy students.
- FLORENCE AND C. WILLIAM FINCK SCHOLARSHIP ENDOWMENT FUND (1957) Established by Mr. and Mrs. C. William Finck of New York City. The income will provide tuition assistance to worthy and deserving students.
- MR. AND MRS. ADOLPH FINE SCHOLARSHIP ENDOWMENT FUND (1957) Established by Mr. and Mrs. Adolph Fine of Minneapolis, Minnesota, and firms with which they are affiliated. The income from this \$25,000 fund, when completed, will provide a tuition scholarship. This scholarship will offer assistance to applicants, regardless of race, creed or color, who demonstrate potentialities for effective citizenship through qualities of sensitiveness, wholesomeness, and practical common sense.
- FINMAN SCHOLARSHIP ENDOWMENT FUND (1961) Established under the Will of the late Samuel Finman of San Francisco, California, the income of which is to be used to aid needy and deserving students.
- FISCHBACH SCHOLARSHIP AND ENDOWMENT FUND (1956) Set up by the family of Mr. Henry F. Fischbach of New York City, the income will provide maintenance and tuition assistance for gifted and needy students, with preference given to those who plan for a career in engineering.
- BEATRICE E. FISCHBACH SCHOLARSHIP ENDOWMENT FUND (1959) Established in honor of their mother by Messrs. Allen, Herbert and Jerome Fischbach of New York City, through the Fischbach Foundation, to assist gifted and worthy students.
- HENRY A. AND MARY FLECK SCHOLARSHIP ENDOWMENT FUND (1959) Established by Charles and Etta G. Fleck of Cleveland, Ohio, the income will provide scholarship help for gifted and needy students.

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- ELLIOTT AND CHARLOTTE FLEISHER SCHOLARSHIP ENDOWMENT (1960)** Established by Elliot and Charlotte Fleisher of Newton, Massachusetts. The income from this fund will be used for scholarship assistance to a worthy student in the field of Creative Arts.
- MOSE AND ROSE FRANKLE SCHOLARSHIP ENDOWMENT FUND (1959)** The income from this bequest established under the terms of the Will of Mose Frankle of Youngstown, Ohio, is to be used for scholarship assistance for deserving and worthy students.
- BEN FRANKLIN MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1953)** A \$10,000 fund established by members of the family in memory of their father of Bellaire, Ohio, income to be used for scholarship aid for deserving students, with preference to those from the vicinity of Bellaire, or the State of Ohio.
- GILBERT FREEMAN FAMILY SCHOLARSHIP ENDOWMENT (1960)** Established by Mr. Gilbert Freeman of Boston, Massachusetts, to provide scholarship assistance to a worthy and deserving student.
- ISRAEL FRIEDLANDER SCHOLARSHIP ENDOWMENT FUND (1956)** Established by the Boy's Apparel Industry to provide a tuition scholarship for a deserving student planning a career in business, with particular emphasis on retailing.
- SAMUEL A. FROMMER ENDOWMENT FOR SCHOLARSHIP OR RESEARCH (1960)** Through a bequest from the late Samuel A. Frommer this fund was established by his wife, Fanny, of Miami, Florida, the income of which will be used for scholarship or research.
- G AND S FOUNDATION SCHOLARSHIP ENDOWMENT FUND (1956)** Established by the Schwarz and Gilfix families of Middletown, Connecticut, to provide tuition assistance to deserving students of high scholastic standing.
- JACK GALEWITZ MEMORIAL ENDOWMENT FUND (1956)** Established by the Estate of Jack Galewitz of New York, the income to be used for scholarship aid to a deserving student.
- CHARLES BRUCE GLINBERG SCHOLARSHIP ENDOWMENT (1960)** Established to subsidize needy and deserving students of high scholastic standing; the first opportunity to be given to those from Milwaukee, but if no student available from that area, this will be extended to applicants from the State of Wisconsin who qualify.
- MR. AND MRS. NATHAN GLOSSER SCHOLARSHIP ENDOWMENT FUND (1953)** Established in honor of the 45th wedding anniversary of Mr. and Mrs. Nathan Glosser of Miami Beach, Florida, by their children, Dr. and Mrs. William H. Bernstein, Mr. and Mrs. Meyer N. Silberstein and Mr. and Mrs. Gerald Glosser, the income to be used for student assistance.
- LEONARD J. GOLDSTEIN MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1953)** Established by friends in memory of Leonard J. Goldstein of Boston, Massachusetts, income to be used for scholarship aid to a deserving student.
- MR. AND MRS. NATHAN S. GOLDSTEIN SCHOLARSHIP ENDOWMENT FUND (1959)** Established by Mr. and Mrs. Nathan S. Goldstein of Harrison, New York, the income will provide a full tuition and maintenance scholarship for a gifted and needy student.

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- ESTHER AND JOSEPH GOLDSTONE SCHOLARSHIP ENDOWMENT FUND (1958)** Established through the Will of Esther Mann Goldstone of Chicago, Illinois, in the amount of \$40,000 for gifted and needy students, preferably from the high schools of the City of Chicago.
- THE MORTON N. AND KAROLINA GONDELMAN SCHOLARSHIP ENDOWMENT FUND (1961)** Established on the occasion of the Bar Mitzvah of their son, Jay Leon Gondekman of Newton, Massachusetts, the income of which is to provide financial assistance to a worthy and deserving student.
- FAY GOODMAN MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1959)** Created through memorial tributes from the family and friends of the late Fay Goodman of Boston, Massachusetts. The income from this fund will be used for scholarship aid to gifted and needy students.
- THE IRVING GORDON AWARD (1961) (ENDOWMENT)** Established by Marvin and Lillian Kratter of New York City in memory of their classmate and friend, Irving Gordon of Passaic, New Jersey, to be assigned to a gifted male student toward his tuition.
- JOHN GORVERS SCHOLARSHIP ENDOWMENT FUND (1960)** Established by the family of the late John Gorners of Swampscott, Massachusetts, the income will provide scholarship assistance to needy and deserving students.
- EMANUEL H. GRATENSTEIN SCHOLARSHIP ENDOWMENT (1959)** Established by Mr. Emanuel H. Gratenstein of New Haven, Connecticut, to provide a tuition scholarship for a gifted and needy student.
- GREATER BOSTON CHAPTER SCHOLARSHIP ENDOWMENT (1960)** Established by members of Greater Boston Chapter to provide scholarships for undergraduates, preferably from the Boston area, and for a yearly prize to a graduating senior exemplary in his conduct and citizenship.
- PETER GROPER SCHOLARSHIP ENDOWMENT FUND (1958)** A fund of \$25,000, established in memory of Peter Groper of Newton, Massachusetts, by his children, the income to be awarded to any deserving and needy students.
- JOSEPH B. AND ESTHER L. GROSSMAN SCHOLARSHIP ENDOWMENT (1960)** Established by Mr. Grossman of Quincy, Massachusetts, the income will provide scholarship assistance to gifted and needy students.
- CLARA AND LUDWIG GUNZENDORFER SCHOLARSHIP ENDOWMENT (1960)** Established as a permanent memorial to the late Samuel J. Moritz of New York City, by the executors of his Estate, to provide an annual scholarship to gifted and needy students.
- MARION AND HENRY HASENFELD SCHOLARSHIP ENDOWMENT FUND (1955)** The income from this fund established by the late Mr. and Mrs. Henry Hassenfeld of Providence, Rhode Island, in honor of their 40th wedding anniversary, to be used for assistance to gifted and needy students.
- PHILIP HERSHON MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1952)** Established by the family and friends of the late Philip Hershon of Boston, Massachusetts, the income to be awarded to a needy freshman from the Metropolitan Boston area, who has shown by his character and perseverance great future potentialities.

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ROSE B. AND SAMUEL HESSBERG MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1953) The income from this bequest of \$5,000 established under the terms of the Will of Rose Brilleman Hessberg of Albany, New York, is to be used for scholarship aid to a worthy student, if possible, a resident of the city of Albany or its environs.

PATRICIA ROSEN HOFFMAN MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1959) Established by Mr. and Mrs. Jack Rosen of Northbrook, Illinois, in memory of their beloved daughter, the income to be assigned to a needy and worthy student majoring in English Literature.

JOHN S. AND AGNES E. HOWLAND SCHOLARSHIP ENDOWMENT FUND (1955) Four annual scholarships to be granted to one worthy student in each undergraduate class, who, in the judgment of the Faculty Committee, displays that character and that leadership which already predict his or her lifelong interest in contributing to the sum total of human understanding and human compassion in the world. Given by those who knew them well during their lifetimes and who believe that this would be in accordance with their wishes.

BEN B. AND NETTIE JACOB SCHOLARSHIP ENDOWMENT FUND (1956) Established as a memorial tribute to Ben B. Jacob of Detroit, Michigan, by his family and friends, the income to assist a worthy student will be supplemented by an annual contribution from the family to provide a full tuition scholarship.

JEWISH VOCATIONAL AID SOCIETY SCHOLARSHIP ENDOWMENT FUND (1954) Established by the Jewish Vocational Aid Society of Boston, Massachusetts, for deserving students regardless of race, creed or color.

DAVID AND ANNIE KAHN FOUNDATION SCHOLARSHIP ENDOWMENT FUND (1955) Established by Mr. and Mrs. Harry Yager, Mr. and Mrs. Julius Kahn, and Mr. and Mrs. Samuel Kahn, in memory of their parents, Mr. and Mrs. David Kahn of North Bergen, New Jersey. The income will provide scholarship assistance to any sophomore, junior or senior who maintains good academic standing, is an effective campus citizen, and is in need of financial aid to complete his or her education.

RAE AND HENRY KALMAN SCHOLARSHIP ENDOWMENT FUND (1959) Established by the Henry Kalman Foundation, Inc., of New York City, to provide a full tuition and maintenance scholarship for a gifted and needy student.

ABRAHAM J. KANE MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1957) The income from this fund established as a memorial to Abraham J. Kane by his nephews, Messrs. Irving, Milton, and the late Marvin Kane, of Cleveland, Ohio, is to be used for scholarship assistance to worthy students.

EVA AND SAMUEL KAPLAN SCHOLARSHIP ENDOWMENT FUND (1960) Established by Mr. and Mrs. Samuel Kaplan of New Bedford, Massachusetts, the income to be available for scholarship purposes; the use of the principal to be determined at a later date.

LEAH AFFRON KARTMAN MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1957) Established by the National Council of Sigma Delta Tau as a \$25,000 fund whose income will provide full tuition to a gifted student concentrating in

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the area of social relations. A memorial tribute to a founder of the University of Illinois chapter of the national sorority and one of its most distinguished leaders since her student days at the University of Illinois.

SAMUEL J. KATZ MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1957) Established in memorial tribute to Samuel J. Katz by his sons, Saul L. Katz, Irwin Katz, and Burton Katz, of Rochester, New Hampshire, to provide scholarship assistance for worthy and deserving students.

JAMES D. AND MARION KAUFFMAN SCHOLARSHIP ENDOWMENT FUND (1956) Established by Mr. and Mrs. James D. Kauffman of New Haven, Connecticut, the income will be used for scholarship aid to a worthy student from the New Haven area.

J. BENN AND ALFRED H. KEIZER SCHOLARSHIP ENDOWMENT FUND (1955) Established by Messrs. J. Benn and Alfred H. Keizer of Boston, Massachusetts, the income will be used for scholarship purposes.

LOUIS I. KEVITT MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1954) Established by Mrs. Ida S. Kevitt of Sherman Oaks, California, as a memorial to her husband, the income to be used to help worthy students.

HERMAN P. KOPPLEMANN SCHOLARSHIP ENDOWMENT FUND (1955) Established with an initial grant by Mr. Leo Wasserman of Boston, Massachusetts, in honor of the 75th birthday of the late Congressman Herman P. Kopplemann of Hartford, Connecticut, to be awarded to a gifted and needy student.

LOUIS AND ELLA KRATTER SCHOLARSHIP ENDOWMENT FUND (1958) An endowment whose income is to provide full maintenance for four students who combine highest character with academic excellence, established by Mr. Marvin Kratter of New York City.

JACK KRIENDLER MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1951) This memorial to the founder of Club Twenty-One was created by the Mu Sigma Fraternity of New York with an initial grant of \$11,900 for scholarship assistance to deserving students, without regard to race, creed, or color.

ABRAHAM LANSKI SCHOLARSHIP ENDOWMENT FUND (1957) An endowment of \$17,500 under the terms of the Will of Abraham Lanski of Chicago, Illinois, whose income is to be used for a gifted and needy student.

LEAGUE FOR CHILD CARE SCHOLARSHIP ENDOWMENT FUND (1958) Established by this organization of New York City to provide tuition assistance for a worthy and needy student.

LOUIS F. AND SELMA LEE SCHOLARSHIP ENDOWMENT FUND (1960) Established by Selma Lee of Sarasota, Florida, to provide annually a full tuition and maintenance scholarship for a needy female student of high academic qualifications in any course of studies at the University who has demonstrated capacity for leadership in Jewish activities.

EVA A. LENSON SCHOLARSHIP ENDOWMENT FUND (1956) Established in memory of Eva A. Lenson of Boston, Massachusetts, by her children, the income from this fund, when complete, is to be awarded to a deserving student.

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- SARA AND ROSA F. LEON SCHOLARSHIP ENDOWMENT FUND (1952)** The income from this bequest established under the terms of the Will of Miss Rosa F. Leon of New Milford, Connecticut, is to be used for scholarships for needy students of high scholastic standing.
- JOSEPH AND PEARL LINCHITZ SCHOLARSHIP ENDOWMENT FUND (1957)** Established by Mr. and Mrs. Joseph Linchitz of Brookline, Massachusetts, in the amount of \$25,000, the income to provide tuition assistance for gifted and needy students.
- MAX LEO LIPSON SCHOLARSHIP ENDOWMENT FUND (1956)** Established by Mr. Max Leo Lipson of Boston, Massachusetts, to provide tuition assistance to worthy students.
- BATRICE E. A. LOURIE MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1956)** Established in memory of his wife by Mr. Harry L. Lourie of Washington, D. C. Special consideration in making this award, when the fund is complete, will be given to women students interested in the social sciences.
- BERTHA LUXNER SCHOLARSHIP FUND (1955)** Established as a memorial to Bertha Luxner of West Orange, New Jersey, by her family. The income to be used for scholarship assistance to gifted and needy students.
- FLORENCE MABEL SCHOLARSHIP ENDOWMENT FUND (1957)** Established by Mrs. Morris Schwartz of New York City, to provide a partial tuition scholarship for a worthy student in the School of Creative Arts.
- HOWARD MACK SCHOLARSHIP ENDOWMENT FUND (1958)** Established by Mr. Howard Mack of Hackensack, New Jersey, to provide tuition assistance to a worthy and deserving student.
- HERMAN MALKIN SCHOLARSHIP FUND (1960)** A permanent endowment fund providing a full annual tuition scholarship for a young man whose high ideals and quest for knowledge best reflect the life and work of Herman Malkin. Established to perpetuate and honor the memory of their brother by Mrs. Harry S. Mayer, of Norwalk, Connecticut, and Mr. and Mrs. Samuel Malkin of New York City.
- MYER MARKOVITCH SCHOLARSHIP ENDOWMENT FUND (1959)** Established by the M & M Transportation Company of Boston, Massachusetts, in memory of its founder. The income from this fund is to be used for an annual scholarship to be awarded to a student of demonstrated financial need, who combines scholastic promise with athletic ability.
- DR. ALEXANDER J. MAYSELS AND CLARA MAYSELS SCHOLARSHIP ENDOWMENT FUND (1955)** Established by Dr. Alexander J. Maysels of Bethlehem, Pennsylvania, the income to provide financial assistance to students of high academic standing interested in a medical career or in the field of music, regardless of race, creed or color.
- HARRY AND CELIA MEYERS SCHOLARSHIP ENDOWMENT FUND (1955)** Established by Mrs. Celia Meyers of Lawrence, Massachusetts, the income will assist a student who specializes in the field of social relations and more particularly, in the field of human relations.

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MIDDLESEX UNIVERSITY SCHOOL OF MEDICINE, CLASS OF 1939, SCHOLARSHIP ENDOWMENT FUND (1959) Established on the occasion of its 20th reunion by members of the Class of '39, Middlesex University School of Medicine, in honored memory of their deceased classmates. The income to be used for financial assistance to pre-medical students.

MOUNT SCOPUS-GEORGE K. GORDON MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1951) Created by the Mount Scopus Lodge, A.F. and A.M., of Malden, Massachusetts, in memory of Dr. George K. Gordon, eighth master, the income will assist a worthy student.

SOL AND SUSANNE MUTTERPERL SCHOLARSHIP ENDOWMENT FUND (1953) Established in honor of the Golden Wedding Anniversary of Mr. and Mrs. Sol Mutterperl of New York City by their children through the Mutterperl Foundation, Inc., with an initial grant of \$5,000, and constantly supplemented by gifts from friends and family. The income to be used for students of high academic standing, who are in financial need.

ROBERT EDWARD MYERS MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1958) Established by Mr. and Mrs. J. D. Myers of Springfield, Illinois, as a memorial tribute to their beloved son who lost his life in the service of his country.

NATIONAL LADIES AUXILIARY, JEWISH WAR VETERANS OF THE UNITED STATES, SCHOLARSHIP ENDOWMENT FUND (1956) The income from the fund established by this organization will provide two annual scholarships for the daughters of war veterans.

SAMUEL NETZKY SCHOLARSHIP ENDOWMENT FUND (1955) Established in memory of Samuel Netzky of Philadelphia, Pennsylvania, by his family and friends to provide a tuition scholarship to gifted and needy students concentrating in the field of Hebrew literature and Judaic studies.

SOLOMON AND ANNIE H. NISSON SCHOLARSHIP ENDOWMENT FUND (1952) Established by Mrs. Samuel Cikins of Newton Highlands, Massachusetts, Mrs. Seebert J. Goldowsky of Providence, Rhode Island, and Mr. Irving L. Nisson of Watertown, Massachusetts, in memory of their parents.

MARIE ORBAN SCHOLARSHIP ENDOWMENT FUND (1960) Established under the will of the late George V. Orban of New York City in honor of the memory of his late mother, for tuition and maintenance of deserving students as selected by the Trustees of the Estate.

MR. AND MRS. MORRIS PALEFSKY SCHOLARSHIP ENDOWMENT FUND (1960) Established by Mrs. Morris Palefsky and the late Morris Palefsky of Lowell, Massachusetts, the income will provide tuition assistance to needy and talented students, preferably from Lowell and its environs.

JACOB PHILLIPS SCHOLARSHIP ENDOWMENT FUND (1960) Established under the terms of the Will of Jacob Phillips of New York City, the income to be used for scholarship assistance to worthy students who promote inter-racial amity.

SAMUEL M. AND JESSIE PINSLY SCHOLARSHIP ENDOWMENT FUND (1958) Established by Mr. and Mrs. Samuel M. Pinsly of Boston, Massachusetts, the income will provide a full tuition scholarship for a talented and needy student.

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- JEROME D. PITKOW SCHOLARSHIP ENDOWMENT FUND (1960)** Established by Mr. Jerome D. Pitkow of Rockville Centre, New York, in memory of his father and brother, to provide a tuition scholarship for a gifted and needy youngster.
- MORRIS POLIVNICK SCHOLARSHIP ENDOWMENT FUND (1951)** Established under the terms of the Will of Morris Polivnick of Brooklyn, New York, the income from a bequest of \$10,000, plus a portion of the income from the Morris Polivnick-Isidor Polivnick Scholarship Endowment Fund if necessary, will provide a \$500 scholarship annually to aid a needy student to undertake or continue his studies.
- MORRIS POLIVNICK-ISIDOR POLIVNICK SCHOLARSHIP ENDOWMENT FUND (1957)** Established under the terms of the Will of Isidor Polivnick of Brooklyn, New York, and further augmented by his son, Herman, the income will supplement the Morris Polivnick Scholarship when necessary, and also provide a \$500 award when such an amount has been accumulated in this fund.
- VICTOR AND MILDRED POTEL SCHOLARSHIP ENDOWMENT FUND (1950)** The income from this bequest established under the terms of the Will of Mildred Potel of Los Angeles, California, is to be used for scholarship assistance to deserving students.
- DANIEL E. AND EVELYN K. PRICE SCHOLARSHIP ENDOWMENT FUND (1961)** Established by Mr. and Mrs. Daniel E. Price of Brookline, Massachusetts, to provide scholarship assistance for worthy and deserving students.
- GERTRUDE RABB MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1957)** Created by her friends as a tribute to the late Gertrude Rabb of Brookline, Massachusetts, the income will provide scholarship assistance to worthy and deserving students, with preference given to those majoring in the life sciences or music.
- SAMUEL AND RIEKA RAPAPORTE, JR., SCHOLARSHIP ENDOWMENT FUND (1950)** The income from this \$15,000 fund is to be used for aid to an outstanding student. Established by Mr. and Mrs. Samuel Rapaporte, Jr., of Providence, Rhode Island.
- SAUL C. RAVITCH MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1959)** Established by Mr. Saul Horowitz and Mrs. Saul Ravitch, Trustees of the H.R.H. Foundation of New York City, to provide an annual scholarship for a deserving and worthy student.
- WILLIAM RAVNER SCHOLARSHIP ENDOWMENT FUND (1960)** A perpetual scholarship in the amount of \$400 annually, established by Mrs. B. F. Roland of Rydal, Pennsylvania, in memory of her father, William Ravner, to provide assistance to gifted and needy students, regardless of sex, race, or creed, with preference being given to those from families with two or more siblings.
- TUBIE RESNIK SCHOLARSHIP ENDOWMENT FUND (1958)** Established by associates and friends of Mr. Tubie Resnik of New York City, the income will provide a tuition scholarship for a student who combines scholastic excellence and athletic ability.

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- CARL RICE MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1956)** Established in memory of Carl Rice of Hartsdale, New York, by his family and friends. Income to be awarded to a deserving student in the School of Creative Arts, majoring in the field of music.
- MAX AND FRANCES G. RITVO SCHOLARSHIP ENDOWMENT FUND (1947)** The income from this fund established by Dr. and Mrs. Max Ritvo of Boston, Massachusetts, is to be used for a student of high academic standing, preferably one interested in medicine, who is in financial need.
- ROGAL-COHAN SCHOLARSHIP ENDOWMENT FUND (1948)** Founded by Messrs. Harry Rogal and Abner Cohan of Boston, Massachusetts, the income to be used for scholarship aid to deserving and outstanding students.
- SALMAN ROSKIN SCHOLARSHIP ENDOWMENT FUND (1958)** Established through a bequest from the Estate of Samuel E. Itkin of Chicago, Illinois, to provide scholarship assistance to worthy and deserving students.
- RACHEL ROSNOSKY MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1959)** Established as a memorial tribute to Rachel Rosnosky of Boston, Massachusetts, by the members of her family, the income to be used for scholarship assistance to a gifted and needy student.
- MARY ROSOFF SCHOLARSHIP ENDOWMENT FUND (1959)** Established by her son, Frank, of New Haven, Connecticut, so that the income each year may be of assistance to a worthy student.
- LOUIS K. ROTH FAMILY FOUNDATION OF HARTFORD SCHOLARSHIP ENDOWMENT FUND (1958)** Established by Mr. Louis K. Roth of West Hartford, Connecticut, the income will provide scholarship assistance to worthy and deserving students.
- MARION ROTHENBERG SCHOLARSHIP ENDOWMENT FUND (1954)** Established by Mrs. Zucio Rothenberg and the late Dr. Rothenberg of Brookline, Massachusetts, in memory of their beloved daughter, the income to be used for assistance to a worthy student who plans for a medical career.
- DIANE L. RUKIN MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1955)** Established in memory of their daughter, Diane, by Mr. and Mrs. David Rukin of West Englewood, New Jersey, the income will be used for scholarship assistance to deserving students who plan to study in the field of medicine.
- ADRIAN H. RYDER SCHOLARSHIP ENDOWMENT FUND (1957)** A \$25,000 benefaction established by Mrs. Adrian H. Ryder to honor the memory of her husband, a distinguished Connecticut philanthropist. Until the fund is completed, a supplementary grant will provide a full tuition scholarship for a student of outstanding academic excellence.
- GEORGE SAGAN SCHOLARSHIP ENDOWMENT FUND (1956)** Established by Mr. George Sagan of New York City, through the Sagan Foundation, the income will be used for scholarship assistance based on scholastic attainment and need.

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SAMUEL SALNY MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1956) Established by Mrs. Samuel Salny and other devoted friends as a tribute to the late Samuel Salny of Boston, Massachusetts. The income will provide scholarship assistance to gifted and needy students.

SANDLER FAMILY SCHOLARSHIP ENDOWMENT FUND (1958) Established by the Sandler family of Boston, Massachusetts, to honor their parents and the memory of their late brothers, Jack and Philip, the income to be awarded to a needy student who preferably has some family connection with the shoe and allied industries.

DAVID SAXE MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1952) Established as a memorial to David Saxe of Brookline, Massachusetts, by his family, the income to be used for scholarship purposes.

BENJAMIN SCHARPS AND DAVID SCHARPS FUND (1952) Established by the Estates of Benjamin Scharps and David Scharps of New York City, the income is to provide scholarships to students in the field of music, and upon the establishment of a law school, in the field of law.

JEROME SCHARY SCHOLARSHIP ENDOWMENT FUND (1952) In accordance with the Will of Ben Schary, established by Mrs. Byrde Schary of New York City, in memory of her beloved son who gave his life for his country in World War II. The income will cover a partial tuition scholarship, with preference given to the children of war veterans.

ABBEY SURREY SCHWARTZ SCHOLARSHIP ENDOWMENT FUND (1952) Established by Mrs. Morris Schwartz and the late Mr. Schwartz of New York City as a memorial to their son, the income will provide a partial tuition scholarship for a deserving student.

HENRY L. SCHWARTZ SCHOLARSHIP ENDOWMENT FUND (1959) Sponsored by Paragon Oil Company of Long Island City, New York, and Curran & Burton, its New England Division, the income will provide a tuition scholarship for a gifted and needy student.

SAMUEL AND ARAMINA SCHWARTZ FOUNDATION SCHOLARSHIP ENDOWMENT FUND (1959) Established by Mrs. Samuel Schwartz of New Haven, Connecticut, in memorial tribute to her beloved husband, for scholarship service to worthy and deserving students.

DR. SAMUEL SCHWEBEL SCHOLARSHIP ENDOWMENT FUND (1957) Set up by Mrs. Dora Schwebel of Youngstown, Ohio, in memory of her distinguished son. The income will provide one-half tuition, one year to an Israeli student studying at Brandeis, and in the alternate year to a student preferably from Youngstown, Ohio.

GERTRUDE AND MORRIS SELIB SCHOLARSHIP ENDOWMENT FUND (1954) Established in honor of the 45th wedding anniversary of Mr. and Mrs. Morris Selib of Brookline, Massachusetts, by their children, Mr. and Mrs. Herbert Selib, Mr. and Mrs. Morris Rothstein, Dr. and Mrs. Samuel Bolan, and Mr. and Mrs. Eliot Michaelson, the income to be used for student assistance.

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- H. LEON SHARMAT SCHOLARSHIP ENDOWMENT FUND IN MUSIC (1959)** Established as a memorial tribute to H. Leon Sharmat of Brookline, Massachusetts, by his wife and children, the income to be used for instrumental instruction for able and needy music students, demonstrating high proficiency in performance.
- JOSEPH H. SHAW SCHOLARSHIP ENDOWMENT FUND (1956)** The income from this bequest established under the terms of the Will of Joseph H. Shaw of Dallas, Texas, will provide scholarship assistance for gifted and needy students.
- JOHN STEIN SCHOLARSHIP ENDOWMENT FUND (1957)** Through a bequest from the late John Stein this fund was established by his sisters, the Misses Harriet, Kate and Laura Stein of New York City and Fort Worth, Texas, the income to be used for scholarship purposes.
- ETTIE STETTHEIMER SCHOLARSHIP ENDOWMENT FUND (1957)** Established by the Estate of Ettie Stettheimer of New York City, the income will be assigned to a student or students concentrating in the area of philosophy.
- JEAN MARKS STILLMAN MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1958)** Established through the Jean Marks Stillman Memorial Foundation, Inc., of Larchmont, New York, the income from this \$10,000 fund, when completed, will provide scholarship assistance to worthy and deserving students.
- HELEN SACHS STRAUS SCHOLARSHIP ENDOWMENT FUND (1955)** Established by Mr. and Mrs. Nathan Straus of New York City, the income is to be awarded to a deserving freshman, irrespective of sex, color, creed or national origin, who is seriously interested in pursuing an academic career leading to work in the field of betterment of interracial relations or betterment of international understanding and world brotherhood.
- LOUIS M. SUBIN MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1961)** Established by the estate of Louis M. Subin of Allentown, Pennsylvania, to provide \$1250 a year for a needy student of high scholastic standing.
- GERALD SUGARMAN MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1950)** The income from this fund created in memory of Gerald Sugarman by his parents, Mr. and Mrs. Myer Sugarman of Cambridge, Massachusetts, is to be used for assistance to outstanding and deserving students.
- SUISMAN FOUNDATION SCHOLARSHIP ENDOWMENT FUND (1952)** Established by the Suisman Foundation of Hartford, Connecticut, the income is to be used for scholarship purposes.
- OLON E. SUMMERFIELD FOUNDATION SCHOLARSHIP ENDOWMENT FUND (1958)** Established by the Solon E. Summerfield Foundation, Inc. of New York City, the income will be used for scholarship purposes to aid gifted and needy students.
- JOE THALLER MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1958)** Established by Mrs. Joseph Thaller of New York City, in memorial tribute to her beloved husband, to provide a tuition scholarship for a worthy and deserving student.

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- A. T. WALLACH MEMORIAL SCHOLARSHIP ENDOWMENT (1960) Established by Mr. and Mrs. Edward I. Wallach of Cleveland, Ohio, in memory of his father, to provide scholarship assistance to young people who are ambitious and determined to have a college education, and whose savings or earnings are insufficient to put them through.
- HAROLD WARSHAW MEMORIAL SCHOLARSHIP ENDOWMENT FUND (1952) Established by his parents, Mr. and Mrs. Irving Warshaw of Brookline, Massachusetts, and the Zelmyer Post, Jewish War Veterans, the income will provide a scholarship for a student upon completion of the freshman year, who best personifies the ideals by which Harold Warshaw lived.
- LOUIS H. WEINER FAMILY SCHOLARSHIP ENDOWMENT FUND (1957) Established by Mr. Louis H. Weiner of Hamden, Connecticut, the income will provide scholarship assistance to a gifted and needy student.
- LAWRENCE A. AND MAE WIEN INTERNATIONAL SCHOLARSHIP FUND (1958) An endowment whose income of \$300,000 annually is to subsidize up to 100 students from foreign countries, whose expenses are to be covered for a year at Brandeis with the privilege of renewal for a second year. The purpose is to provide a steady flow of brilliant foreign college students to enrich Brandeis campus life and to send student ambassadors back into their own educational systems with a firsthand knowledge of the United States.
- MR. AND MRS. ROBERT YUSEN SCHOLARSHIP ENDOWMENT FUND (1956) Established by Mr. and Mrs. Robert Yusen of Boston, Massachusetts, in memory of Sophie and Max Rich, for scholarship assistance to worthy and deserving students.
- HARRY ZEITZ SCHOLARSHIP ENDOWMENT FUND (1959) Established by the family and the devoted friends of Mr. Harry Zeitz of New York City, to honor his 65th birthday. The income to be used for the encouragement of worthy college students.

APPENDIX VII

Scholarship Funds

- MR. AND MRS. NAT ABELSON SCHOLARSHIP (1961) Established by Mr. and Mrs. Nat Abelson of New York City in honor of their daughters, Betty and Marcy, to provide scholarship assistance for worthy students.
- ABELSON AND GETZ FOUNDATION SCHOLARSHIP (1952) A tuition scholarship given by Messrs. Lester S. and Morton S. Abelson and Oscar Getz of Chicago, Illinois, for a deserving student.
- EVELYN ABRAMSON SCHOLARSHIP (1955) A tuition and maintenance scholarship established in honor of his wife by Mr. Fisher Abramson of New Bedford, Massachusetts.
- ALICE E. ADAMS SCHOLARSHIP (1959) Established by Mrs. Alice E. Adams of Miami Beach, Florida, to provide a tuition scholarship for a needy and deserving student.
- MICHAEL ADDISON MEMORIAL SCHOLARSHIP TRUST FUND (1956) Established by Mrs. Viola G. Addison of New York City, as a memorial to her beloved husband. The income and part of principal, where necessary, to be used for an annual scholarship to a deserving student.
- MAX AND SOPHIE R. ADLER MEMORIAL SCHOLARSHIP (1955) Established in memory of Max and Sophie R. Adler by their children through the Max and Sophie R. Adler Fund, of Chicago, Illinois. Preference to be given to music majors.
- SAUL ALDERMAN SCHOLARSHIP (1960) Established by Mrs. Eva G. Alderman as a memorial for her husband. This scholarship is to go to worthy and needy students from the New Haven area of the State of Connecticut.
- SAUL ALEXANDER FOUNDATION SCHOLARSHIP (1956) Established by the Saul Alexander Foundation of Charleston, South Carolina, for scholarship assistance to worthy and deserving students.
- SIDNEY AND PHYLLIS ALLEN SCHOLARSHIP (1956) A tuition scholarship established by Mrs. Sidney J. Allen and the late Sidney J. Allen of Detroit, Michigan, to be awarded to an outstanding and deserving student residing in Allen Hall on the Brandeis University campus.
- SAMUEL AND BESSIE ALPERS SCHOLARSHIP (1955) A partial tuition scholarship established by Mr. Moses Alpers of Salem, Massachusetts to aid a deserving student.
- ALPHA OMEGA (LONO ISLAND ALUMNI CHAPTER) SCHOLARSHIP (1953) A partial tuition scholarship established by the Long Island Alumni Chapter of the Alpha Omega Fraternity for aid to a pre-dental student.
- ALUMNI ASSOCIATION SCHOLARSHIP (1957) A scholarship of \$500 for academic excellence, established by the Alumni Association of Brandeis University.

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- AMERICAN BUILDING MAINTENANCE CHARITABLE FOUNDATION SCHOLARSHIP (1959)** Established by the American Building Maintenance Charitable Foundation of Los Angeles, California, to provide scholarship assistance to a gifted and needy student.
- HERBERT A. ARONSSON SCHOLARSHIP (1958)** Established by Mr. Herbert A. Aronsson of Detroit, Michigan, for scholarship assistance to a student majoring in pre-medical studies.
- ERNEST M. ASH SCHOLARSHIP (1960)** A partial scholarship established by Mr. Ernest M. Ash of New York City, to assist worthy students.
- EARL AND GLADYS ASHWORTH SCHOLARSHIP (1956)** Established by Mr. Earl Ashworth of Haverhill, Massachusetts, to provide tuition assistance for a gifted and needy student.
- ANTHONY ATHANAS SCHOLARSHIP (1960)** Established by Mr. Anthony Athanas of Lynn, Massachusetts, for scholarship assistance to a worthy and deserving student.
- JAMES AXELROD SCHOLARSHIP (1955)** A tuition scholarship established by Mr. James Axelrod of Boston, Massachusetts, to assist gifted and needy students.
- BALDOC HILLS SCHOLARSHIP FUND (1951)** Established by the Baldoc Hills Scholarship Committee for Brandeis University in Pittsburgh, Pennsylvania, to provide scholarships for students from the Tri-State area.
- SAMUEL BARIT MEMORIAL SCHOLARSHIP (1951)** Given in memory of Samuel Barit by his wife, Mrs. Sophia Barit, of Scranton, Pennsylvania, and children as an annual scholarship to a worthy student in recognition of outstanding scholastic achievement.
- DR. PAUL S. BARRABEE MEMORIAL SCHOLARSHIP (1956)** Established by Mr. and Mrs. Max Kargman of Boston, Massachusetts, as a partial tuition scholarship to assist a deserving student, in memorial tribute to Dr. Paul S. Barrabee of Newton, Massachusetts.
- JUDGE JENNIE LOITMAN BARRON SCHOLARSHIP (1959)** Established by Mr. and Mrs. Joseph F. Ford of Brookline, Massachusetts, in honor of Judge Jennie Loitman Barron, to provide scholarship assistance to a gifted and needy student.
- HARRY A. BASS SCHOLARSHIP (1959)** Established by Mr. Harry A. Bass of Brookline, Massachusetts, to provide a tuition scholarship for a worthy and gifted student.
- JAMES B. BEAM DISTILLING COMPANY SCHOLARSHIP (1952)** A tuition scholarship given by the James B. Beam Distilling Company of Chicago, Illinois, for a worthy student.
- BENCO TOGS SCHOLARSHIP (1959)** Established by Benco Togs of New York City, to provide a tuition scholarship for a worthy and needy student.

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JAMIE HILL BENESCH MEMORIAL SCHOLARSHIP (1960) Established as a memorial tribute by Mrs. Evelyn K. Hill and Mr. and Mrs. James I. Hill of New York City, to provide financial assistance to students with preference for those who plan to go on with careers in child psychology.

TILLIE BERG SCHOLARSHIP (1958) Established in honor of his mother by Mr. Arthur A. Berg of Chicago, Illinois, to provide scholarship assistance to needy and worthy students, with preference to those who follow a liberal course in education or in the pre-medical curriculum.

DAVID BERGER SCHOLARSHIP (1957) Established by Mr. Arthur M. Berger of Scarsdale, New York, in memory of his brother, David, of St. Louis, Missouri, to assist a deserving student.

LILLIAN AND SAMUEL BERGER SCHOLARSHIP (1961) Established by Mr. and Mrs. Berger of New York City, to provide tuition scholarships to gifted and needy young people.

MAX BERGER SCHOLARSHIP TRUST FUND (1956) Established by Mr. Max Berger of Boston, Massachusetts, the income is to be used for scholarship assistance to gifted and needy students.

MR. AND MRS. STANLEY BERGERMAN SCHOLARSHIP (1953) A tuition scholarship established by Mr. and Mrs. Stanley Bergerman of Beverly Hills, California.

IDA BERMAN MEMORIAL SCHOLARSHIP (1960) Established by Dr. and Mrs. William Rosenberg of Willmet, Illinois and Mr. and Mrs. Lee D. Brown of Chicago, Illinois, to provide scholarship assistance to a gifted and needy student.

GOTTFRIED AND DORIS BERNSTEIN SCHOLARSHIP (1949) A tuition and maintenance scholarship totaling \$1,000 for a student with a visual handicap, established by the Blind Service Association of Chicago, Illinois, as a tribute to the work of Mrs. Gottfried Bernstein who has been president of this Association for many years.

LEONARD BERNSTEIN MUSIC SCHOLARSHIP TRUST (1961) Set up by a distinguished former member of the Brandeis Faculty so that from income and principal a full tuition scholarship may be made available annually, to an undergraduate student who is concentrating on music.

DR. MONTROSE BERNSTEIN SCHOLARSHIP (1959) A tuition scholarship established by Dr. Montrose Bernstein of Los Angeles, California, for a gifted and worthy student.

MR. AND MRS. HARRY (LILLIAN) BLACKMAN SCHOLARSHIP (1960) Established by Mr. and Mrs. Harry Blackman of Beverly Hills, California, to provide scholarship assistance to a worthy and deserving student.

ROBERT AND ADELE S. BLANK SCHOLARSHIP (1960) Established by Robert and Adele S. Blank of New York to provide a partial tuition scholarship for worthy and deserving students.

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- ALFRED S. BLOOMINGDALE SCHOLARSHIP (1959)** Established by Mr. Alfred S. Bloomingdale of Los Angeles, California, to provide scholarship assistance to worthy and deserving students.
- CARL BLUMENTHAL SCHOLARSHIP (1952)** A partial tuition scholarship for a needy student whose special interest is Jewish history and philosophy, donated by Dr. Alan N. Kleederman of Linden, New Jersey.
- BOCK-SHERMAN SCHOLARSHIP FUND OF THE E. D. SHERMAN & COMPANY (1961)** Established for gifted & needy students concentrating in the Creative Arts.
- RAYMOND H. BOHR SCHOLARSHIP (1957)** Established by Mr. Raymond H. Bohr of West Englewood, New Jersey, to provide a partial tuition scholarship for a worthy and gifted student.
- S. WILLIAM AND LILLIAN W. BORGENICHT SCHOLARSHIP TRUST FUND (1958)** A scholarship for half tuition to be drawn from a trust fund set up by the Estate of Lillian W. Borgenicht of New York City.
- MORRIS BERKOWITZ BORNSTEIN SCHOLARSHIP IN MUSIC (1960)** Established by Mr. & Mrs. Bernard Bornstein of Boston, Massachusetts, for partial scholarship assistance to a worthy and deserving student majoring in the field of music.
- ELIAS BRACHMAN MEMORIAL SCHOLARSHIP (1958)** A tuition scholarship established by Loma Plastics, Inc., through Mr. and Mrs. Louis H. Barnett of Fort Worth, Texas, in memorial tribute to Mrs. Barnett's father, to be awarded to a student athlete majoring in the sciences.
- THE HERMAN BRALOFF SCHOLARSHIP FUND (1961)** Assigned from the Estate of Herman Braloff through the cooperation of the 92nd Street YMHA and its Executive Director, Jack Nadell, to underwrite scholarship assistance for students who originate in the New York City area.
- BRANDEIS UNIVERSITY GOURMET CLUB SCHOLARSHIP (1960)** Co-Chairmen, Burton H. Olin and Richard Grawoig, Chicago, Illinois, to provide scholarship assistance to a worthy and deserving student.
- BRANDEIS UNIVERSITY SCHOLARSHIP COMMITTEE (1960)** Established by the Scholarship Committee of Brandeis University, to provide scholarship assistance to a worthy and deserving student.
- HENRY L. BRANDT SCHOLARSHIP (1960)** Established from the Estate of Henry L. Brandt of Newton, Massachusetts, for the assistance of worthy students.
- BERNARD BREGSTEIN SCHOLARSHIP (1957)** Established by Mr. Bernard Bregstein of New York City, to provide scholarship assistance for worthy and deserving students.
- MR. AND MRS. SAMUEL BREITMAN SCHOLARSHIP (1960)** Established by their son and family with the hope that some worthy young man or woman will be given the opportunity to further their education.
- LOUIS A. BRESKIN SCHOLARSHIP (1960)** Established by Mr. Louis A. Breskin of Chicago, Illinois to provide scholarship assistance to a worthy and deserving student.
- ETHEL BRESLOFF SCHOLARSHIP (1959)** Established in memorial tribute to Ethel Bresloff of Boston, Massachusetts, by the Executor of her Estate, Colonel Bernard L. Gorfinkle.

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- NORMAN BROTMAN MEMORIAL SCHOLARSHIP (1960)** A memorial tribute to Norman Brotman, established by his friends, to provide scholarship assistance to a worthy and deserving student.
- ESTHER AND HARRY BROWN SCHOLARSHIP FUND (1956)** A tuition scholarship established by Mr. and Mrs. Harry Brown of Haverhill, Massachusetts, in honor of Mr. Brown's 70th birthday, to be awarded to a worthy student of outstanding ability.
- JOSEPH W. AND SARAH M. BURG SCHOLARSHIP (1960)** Established by Mr. J. William Burg of Newton Centre, Massachusetts, to provide scholarship assistance to a worthy and deserving student.
- MILDRED H. BURG SCHOLARSHIP (1959)** Established in honor of Mrs. Mildred H. Burg's 70th birthday by her daughter and son-in-law, Mr. and Mrs. A. Raymond Tye of West Newton, Massachusetts, to provide a tuition scholarship for a deserving and gifted student.
- HENRY BURR SCHOLARSHIP (1960)** Established by Mr. Henry Burr of New York City, to provide scholarship assistance to worthy and deserving students.
- MR. AND MRS. SELIG S. BURROWS SCHOLARSHIP (1953)** A tuition scholarship given by Mr. and Mrs. Selig S. Burrows of New York City for aid to a deserving student.
- MEYER J. BUTENSKY SCHOLARSHIP (1958)** Established by Mr. Meyer J. Butensky of New York City, to provide a four-year tuition scholarship for a worthy and needy student.
- ROBERT P. CABLE SCHOLARSHIP (1960)** Established by the Supervisors, Foremen, and Executive Group of the Cable Raincoat Company of Boston, Massachusetts, in memorial tribute to their late employer, to provide tuition assistance to a worthy and deserving student.
- DR. AND MRS. HAROLD CAGEN SCHOLARSHIP (1958)** Established by Dr. and Mrs. Harold Cagen of Farmingdale, New York, to provide a full tuition scholarship for a gifted and needy student.
- H. B. CANTOR FOUNDATION SCHOLARSHIP (1957)** Established by the H. B. Cantor Foundation of New York City, through Mr. Hyman B. Cantor, to provide two tuition scholarships for gifted and worthy students.
- MARJORIE CANTOR MEMORIAL SCHOLARSHIP (1959)** Established in memory of Marjorie Cantor, Mrs. Charles Brown, and the late Mr. Charles Brown, of Beverly Hills, California, to provide a tuition scholarship for a gifted and needy student.
- MARJORIE CANTOR SCHOLARSHIPS (1959)** Four full tuition scholarships established in her memory by her parents, Eddie and Ida Cantor, of Beverly Hills, California, to be assigned to needy students who show promise of outstanding citizenship.
- MARJORIE CANTOR MEMORIAL SCHOLARSHIP (1959)** Established by Mr. John Landis of Los Angeles, California, in memory of Marjorie Cantor for aid to a gifted and worthy student.

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- MARJORIE CANTOR MEMORIAL SCHOLARSHIP (1959)** Established in memorial tribute to Marjorie Cantor by Mr. Benjamin Swig of San Francisco, California, as a tuition scholarship for a worthy and deserving student.
- BENJAMIN N. CARDOZO SCHOLARSHIP (1952)** Established by the Benjamin N. Cardozo Lodge No. 1874 of B'nai B'rith, New York City, as a partial tuition scholarship.
- CHRIS CARLOS SCHOLARSHIP (1961)** Established by Mr. Chris Carlos of Atlanta, Georgia, to provide scholarship assistance for a worthy student.
- ROBERT A. CARPENTER POST NO. 485, JEWISH WAR VETERANS SCHOLARSHIP (1954)** Established by the Robert A. Carpenter Post 485, Jewish War Veterans of Boston, Massachusetts, to provide financial assistance to a worthy boy or girl graduating from a high school in the Boston area.
- FRANK CASTY SCHOLARSHIP (1955)** Established as a tuition scholarship by Mr. Frank Casty of Boston, Massachusetts, to aid a promising and worthy student.
- FRANK AND MATILDA CASTY SCHOLARSHIP (1958)** Established in honor of his parents as a four-year tuition scholarship by Mr. David Casty of Newton Centre, Massachusetts, for a worthy and needy student.
- MR. AND MRS. PHILIP CATSMAN SCHOLARSHIP (1960)** Established in honor of his parents by Mr. Samuel M. Catsman of Flint, Michigan, to provide a full tuition scholarship for a gifted and needy student.
- THE SARA CHAIT MEMORIAL SCHOLARSHIPS (1960)** For worthy students, who, without this assistance, would be unable to attend Brandeis. Also to be assigned to deserving undergraduates studying the sciences offered without restriction to nationality, color or creed.
- JEANNETTE CHARNAY SCHOLARSHIP (1958)** Established as a tribute to his mother by Mr. David B. Charnay of New York City. This one-year tuition scholarship will provide assistance to a gifted and needy student.
- THE CHEMICAL CLUB OF NEW ENGLAND SCHOLARSHIP AWARD (1961)** Established by the Chemical Club of New England to provide scholarship assistance to a junior or senior student whose residence is in one of the New England States and who is majoring in the field of Chemistry.
- CHILDREN'S COAT FIRM SCHOLARSHIP (1956)** A tuition and maintenance scholarship established jointly by five children's coat firms in New York City: Cy Anstendig & Co., Ellen Girl Coat Co., Little Empress Coat Company, New Cameron Coat Company and Victory Girl Coat Company.
- ELIZABETH CHITEN SCHOLARSHIP (1960)** A partial tuition scholarship established in memory of past President Elizabeth Chiten, by her husband Mr. William Chiten and the Robert A. Carpenter Post 485, Jewish War Veterans of Boston, Massachusetts, to provide financial assistance to a worthy student who plans to attend medical school.
- IVOR B. CLARK SCHOLARSHIP (1959)** Established by the late Ivor B. Clark of New York City, in honor of Mr. Erwin S. Wolfson, to provide a tuition scholarship for gifted and needy students.

APPENDIX

THE CLAYMAN SCHOLARSHIP (1960) Established by the Clayman family to provide scholarship assistance to a worthy and deserving student.

PENNETH M. and LUCILLE G. CLINE SCHOLARSHIP (1957) Established by Mrs. Penneth Cline, family, and friends to honor Mr. Penneth Cline of Newton, Massachusetts, on his 40th birthday. This partial tuition scholarship will be awarded to a worthy and deserving student majoring in the physical sciences.

CLUB 11, INC. SCHOLARSHIP (1960) Established by Mr. Murray Brownstein of New York City, to provide scholarship assistance for a needy student who might not otherwise be able to attend school.

107 CLUB SCHOLARSHIP (1957) Established by the 107 Club of New York City to provide tuition assistance for a worthy and deserving student.

COAT CRAFT COMPANY SCHOLARSHIP (1959) Established by the Coat Craft Company of Philadelphia, Pennsylvania, to provide a tuition scholarship for a worthy and deserving student.

ABE COHEN SCHOLARSHIP (1959) Established by Mr. Abe Cohen of New York City, to provide a one-year tuition scholarship for a gifted and worthy student.

ALTA COHEN SCHOLARSHIP (1955) Established by Mr. Alta Cohen of South Orange, New Jersey, to provide financial assistance to worthy students.

ESTA AND OSCAR COHEN SCHOLARSHIP FUND (1957) Set up by Mr. Oscar Cohen of Boston, Massachusetts, and his friends as a birthday tribute, for subsidies to gifted and needy students.

GILBERT COHEN SCHOLARSHIP (1954) A partial tuition scholarship established by Mr. Gilbert Cohen of West Springfield, Massachusetts, for financial assistance to worthy students.

J. W. COHEN FOUNDATION SCHOLARSHIP (1953) Established as a partial tuition scholarship by the J. W. Cohen Foundation of Chicago, Illinois, to aid a deserving student.

MISS LEN COHEN MEMORIAL SCHOLARSHIP FUND (1961) Established as a memorial tribute to Miss Len Cohen of New York City by her family. Annual scholarships are to be awarded to gifted students who have demonstrated character and leadership qualities which will contribute understanding, compassion and service to humanity, thus perpetuating her own way of life.

SAMUEL COHEN AND JOSEPH EDELSTEIN SCHOLARSHIP (1953) A tuition scholarship given by Messrs. Lawrence Cohen, Harry and Arthur Edelstein of Chicago, Illinois, in honor of their fathers.

SOL COHEN SCHOLARSHIP (1956) Established by Mr. Sol Cohen of New York City, to be awarded as scholarship assistance for worthy and deserving students.

JACOB COHN SCHOLARSHIP (1957) Established by Mr. Jacob Cohn of Chicago, Illinois, to provide scholarship assistance for worthy and needy students.

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COMMITTEE OF THE PERMANENT CHARITY FUND, INC., SCHOLARSHIP (1956) Established by the Committee of the Permanent Charity Fund, Inc., of Boston, Massachusetts, to provide scholarship aid, with preference being given to students from Massachusetts.

CONGRESS FACTORS CORPORATION SCHOLARSHIP (1961) Established by Congress Factors Corporation of New York City to provide tuition scholarships for worthy students.

SANDRA CONSTANTINE SCHOLARSHIP (1956) Established in honor of his sister, Sandra, by Mr. Lawrence Constantine of Boston, Massachusetts, for assistance to a student who might otherwise not enjoy the advantages of a college education.

MORRIS COOPER SCHOLARSHIP (1959) Established by Mr. Morris Cooper of New York City to provide a five-year tuition scholarship for gifted and needy students.

SAUL COOPERSTEIN SCHOLARSHIP (1960) Established by Mr. Saul Cooperstein of Swampscott, Massachusetts to assist needy and worthy students.

MR. AND MRS. A. B. CORWIN SCHOLARSHIP (1961) Established by Mr. and Mrs. A. B. Corwin of Harrison, New York, to provide scholarship assistance for worthy students.

ARNOLD R. CUTLER SCHOLARSHIP (1960) Established by Mr. Arnold R. Cutler of Boston, Massachusetts, to provide scholarship assistance to a worthy and deserving student.

THE ALFRED A. DAVIS SCHOLARSHIP (1961) Established by Mr. Alfred A. Davis of Atlanta, Georgia, to provide scholarship assistance to a worthy student.

MR. AND MRS. HARRY DEAKTOR SCHOLARSHIP (1960) Established by Mr. and Mrs. Harry Deaktor of Pittsburgh, Pennsylvania, to provide scholarship assistance to a worthy and deserving student.

GILBERT B. DIAMOND MEMORIAL SCHOLARSHIP (1957) Established by Dr. J. L. Diamond of Oak Ridge, Tennessee, to provide scholarship assistance to worthy and deserving students.

THE DINERS' CLUB SCHOLARSHIP (1960) Established by Mr. Alfred S. Bloomingdale of Los Angeles, California and Mr. Ralph E. Schneider of New York City, to provide scholarship assistance to needy students with high scholastic standing.

MARGARET E. EBSARY SCHOLARSHIP TRUST FUND (1959) Established through a bequest from the Estate of Margaret E. Ebsary of Rochester, New York, to aid worthy students who are majoring in pre-rabbinic studies, with preference to those from the vicinity of Rochester, New York.

WILLIAM EINHORN SCHOLARSHIP (1958) Established in memorial tribute to his father by Mr. Herbert A. Einhorn of Larchmont, New York, to provide scholarship assistance to a needy and worthy student.

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- ELGEET OPTICAL SCHOLARSHIP (1959)** Established by the Elgeet Optical Company, Inc., of Rochester, New York, to provide a tuition scholarship for a worthy and deserving student.
- MAX AND FRANCES ELKON SCHOLARSHIP (1961)** Established by Mr. Max Elkon of New York City, to provide scholarship assistance to a worthy and deserving student.
- S. M. ELOWSKY SCHOLARSHIP (1959)** Established by Mr. S. M. Elowsky of New York City, to provide a tuition scholarship for a worthy and deserving student.
- BENJAMIN ENDE SCHOLARSHIP (1961)** Established by Mr. Benjamin Ende of Mt. Vernon, New York, to provide partial scholarship assistance to a worthy and deserving student.
- ARTHUR C. ENGEL SCHOLARSHIP (1961)** Established by Mr. Arthur C. Engel of Haverhill, Massachusetts, to provide scholarship assistance to worthy students.
- EPSTEIN-RUBIN FOUNDATION SCHOLARSHIP (1961)** Established by Mr. and Mrs. Saul Epstein and Mr. and Mrs. Sol R. Rubin of Los Angeles, California, in memory of Freda E. Colen, to provide scholarship assistance to a worthy pre-medical student.
- THE MARGARET AND PHILIP FABRIKANT SCHOLARSHIP (1961)** Established by Mr. and Mrs. Irving X. Fabrikant of New York City, to provide scholarship assistance to a worthy and deserving student.
- MORRIS AND BESSIE FALK SCHOLARSHIP (1960)** Established by Mr. Morris Falk of Fitchburg, Massachusetts, to provide scholarship assistance for a worthy and needy student.
- JOSEPH FAMOLARE SCHOLARSHIP (1960)** Established by Mr. Joseph Famolare of Boston, Massachusetts, to provide scholarship assistance for a worthy and needy student.
- SIDNEY FARBER SCHOLARSHIP (1961)** Set up by the distinguished Dr. Sidney Farber, Professor of Pathology, Harvard Medical School at the Children's Hospital, and Director of Research, The Children's Cancer Research Foundation, to help subsidize training of students planning for careers in medicine or medical education.
- FEINBERG FOUNDATION SCHOLARSHIP (1957)** Established through Mr. George J. Feinberg of West Long Branch, New Jersey, to provide a tuition scholarship for gifted and needy students.
- SARAH FEINBERG MEMORIAL SCHOLARSHIP (1958)** Established by the Feinberg Foundation of El Paso, Texas, for partial tuition assistance to a worthy and deserving student, with preference to a resident of the State of Texas.
- I. IRVING FELD MEMORIAL SCHOLARSHIP (1951)** A partial tuition scholarship established in memory of I. Irving Feld by his nieces, Mrs. Robert Wolfson of Ladue, Missouri, and Mrs. Leonard Strauss of Kansas City, Missouri.
- ALBERT J. FELDMAN MEMORIAL SCHOLARSHIP (1957)** A tuition scholarship contributed by Mr. and Mrs. Joseph F. Ford of Brookline, Massachusetts, in memorial tribute to Mr. Albert J. Feldman of Chestnut Hill, Massachusetts, to be used for a gifted and needy student.

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- J. M. FELDMAN SCHOLARSHIP (1959)** Established by Mr. J. M. Feldman of Los Angeles, California, as a tuition scholarship to aid a worthy and deserving student.
- NED FELDMAN SCHOLARSHIP (1958)** Established by Mr. Ned Feldman of Nashville, Tennessee, to provide a tuition scholarship for a worthy and gifted student.
- SAMUEL AND NATHAN FELDMAN FAMILY SCHOLARSHIP (1959)** Established by this family group of Jersey City, New Jersey, to provide tuition assistance to a needy and deserving student.
- SAMUEL FIELD FAMILY FOUNDATION SCHOLARSHIP (1957)** Established by the Samuel Field Family Foundation of New York City, through Mr. Samuel Field, to provide a tuition scholarship for a gifted and needy student.
- FLORENCE AND C. WILLIAM FINCK SCHOLARSHIP (1957)** Established by Mr. and Mrs. C. William Finck of New York City, to provide a tuition scholarship for a gifted and needy student.
- MR. AND MRS. ABRAHAM FINE SCHOLARSHIP (1959)** Established by Mr. and Mrs. Abraham Fine of Miami Beach, Florida, to provide a tuition scholarship for worthy and deserving students.
- DAVID L. FINE SCHOLARSHIP (1960)** Established by Mr. Howard J. Fine (M. H. Fine Co.) of Boston, Massachusetts to provide scholarship assistance to a worthy and deserving student.
- HARRIET EILEEN FINKEL MEMORIAL SCHOLARSHIP (1960)** A partial scholarship established by Mr. and Mrs. Jason M. Finkel and Boston Spirits Chapter B'nai B'rith in memory of their daughter, Harriet Eileen Finkel, to be given to a worthy and needy student.
- IRENE CARP FINKELSTEIN SCHOLARSHIP (1960)** Established by Mr. and Mrs. Lester Finkelstein of Beverly Hills, California to assist a needy and gifted youngster.
- MR. AND MRS. LEO FINKELSTEIN SCHOLARSHIP (1960)** Established by Mr. and Mrs. Leo Finkelstein of Linden, New Jersey, to provide scholarship assistance to gifted and needy students.
- MARY FINKELSTEIN SCHOLARSHIP (1960)** Established by Rose and William Finkelstein of Waterbury, Connecticut as a memorial tribute to their mother, to provide scholarship aid for a needy student of high scholastic achievement.
- ROBERT AND AUGUSTA FINKELSTEIN FUND (1956)** Established by Mrs. Robert Finkelstein of Woonsocket, Rhode Island, this fund will provide scholarship assistance.
- HENRY F. FISCHBACH SCHOLARSHIP (1959)** A full maintenance scholarship established by Mr. Henry F. Fischbach of New York City, at a University function in honor of Mr. Erwin S. Wolfson.

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PHILIP FISHER SCHOLARSHIP (1961) Established by Mr. Philip Fisher of New York City to provide scholarship assistance for worthy students.

SIMON FISHER SCHOLARSHIP (1958) Established by Mr. Simon Fisher of Chicago, Illinois, on the occasion of a University tribute to Mr. Harry Marks, this scholarship will provide four years' full tuition assistance to a talented and needy student.

FOOD FAIR STORES SCHOLARSHIPS (1956) Established by the Food Fair Stores Foundation for tuition and maintenance assistance to eight students exemplifying qualities of civic interest, leadership and scholarship. Preference is to be given first to freshmen and then to upperclassmen who are employees, or sons and daughters of present or deceased employees of Food Fair Stores; if such applicants are not available, the University may award the scholarships to qualified students.

JOSEPH AND CLARA FORD SCHOLARSHIP (1949) Established by Mr. Joseph F. Ford of Boston, Massachusetts, Treasurer of the Brandeis University Board of Trustees, as an annual tuition scholarship for a deserving student.

ANNE FOREMAN MEMORIAL SCHOLARSHIP (1957) Established in memory of Mrs. Samuel Foreman by Dr. and Mrs. Irving Helfert of Dayton, Ohio, to provide scholarship assistance for worthy and deserving students.

ALEX FORMAN SCHOLARSHIP (1951) A partial tuition scholarship created by the late Alexander Forman of Washington, D. C., to assist an outstanding student.

ROBERT AND PHILIP FORREST SCHOLARSHIP (1956) Established in honor of their parents, Mrs. Abraham Finkelman and the late Mr. Finkelman, of Brookline, Massachusetts, to provide tuition assistance for a needy and deserving student in the field of science.

ANNE FRANK SCHOLARSHIP (1956) Established in her memory by Mr. and Mrs. Albert Hackett of Los Angeles, California, to provide scholarship aid to gifted and needy students concentrating in the field of writing.

EMANUEL FRANK FOUNDATION SCHOLARSHIP TRUST (1959) Established by the Emanuel Frank Foundation of New York City, the income will provide tuition assistance to needy students.

HARRISON JULES LOUIS FRANK AND LEON HARRISON FRANK CORPORATION MEMORIAL SCHOLARSHIP (1953) A partial tuition scholarship in memory of the founders of the Bulldog Electric Products Company of Detroit, Michigan, to be awarded to an outstanding junior and senior majoring in the physical sciences.

ANNE FRANKLIN MEMORIAL SCHOLARSHIP (1959) Established in memory of his sister, Anne Franklin, by Mr. Philip Granoff of Brookline, Massachusetts, for scholarship assistance to a gifted and needy student.

DR. HAROLD FRANKLIN MEMORIAL SCHOLARSHIP (1958) Established in memorial tribute to Dr. Harold Franklin of Leonia, New Jersey, by his wife and children, as a partial tuition scholarship for a worthy and deserving student.

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- FRENCH EMBASSY SCHOLARSHIP (1959)** Set up for assistance in the French Department, for a student concentrating in French language and literature.
- GUSRIED V. FREUND MEMORIAL SCHOLARSHIP FUND (1955)** A tuition scholarship established by the Frankfort Distillers Company of New York City, as a memorial to Gusried V. Freund.
- JACOB R. FREUND SCHOLARSHIP (1961)** Established by Mr. Jacob R. Freund to be used for a needy student who without this assistance could not attend college.
- DAVID AND SADIE FRIEDLAND SCHOLARSHIP (1959)** Established by Mr. Abner N. Friedland of New York City, to provide scholarship assistance to a gifted and needy student.
- FRIEDMAN FOUNDATION SCHOLARSHIP (1949)** Established as a partial tuition scholarship by the Friedman Foundation of New York, for a gifted boy from the New York City area.
- MR. AND MRS. M. L. FRIEDMAN SCHOLARSHIP (1959)** Established by Mr. and Mrs. M. L. Friedman of Miami Beach, Florida, to provide a tuition scholarship for a worthy and gifted student.
- RICHARD FROST SCHOLARSHIP (1952)** A tuition scholarship established by Mr. Charles Frost of New York City, in honor of his son.
- JULES E. AND ETTA M. FURTH SCHOLARSHIPS (1951)** Two tuition scholarships for outstanding students created in memory of his parents by Mr. Lee J. Furth of Chicago, Illinois.
- THE JOSEPH C. FUSCO SCHOLARSHIP (1961)** Established by Mr. Joseph C. Fusco of Chicago, Illinois, to provide scholarship assistance to worthy students.
- I. GAINSBURG SCHOLARSHIP (1958)** Established by Gainsburg, Gottlieb, Levitan & Cole of New York City in honor of Mr. I. Gainsburg, to offer tuition assistance to worthy students.
- RACHEL, MICHAEL AND AARON GALENA SCHOLARSHIPS (1956)** Two tuition scholarships established by Mrs. Edward Hyman of Columbus, Ohio, in memory of her parents and brother, to aid worthy students regardless of race, creed, or color.
- BERNARD GARFIELD SCHOLARSHIP (1960)** Established by Ideal Tape, Inc. of Lowell, Mass., for partial scholarship assistance to a worthy and deserving student.
- ABEL E. GARNER FAMILY SCHOLARSHIP (1960)** Established by Mr. Abel E. Garner of New York City to provide a full tuition scholarship for two years for a young man or woman of academic promise and financial need concentrating in the field of economics or one of the areas of the sciences.
- GASH, FEROLIE CORPORATION SCHOLARSHIP (1960)** Established by the Gash, Ferolie Corporation of New York City, to provide scholarship assistance to gifted and needy students.
- MARY GASTWIRTH SCHOLARSHIP (1959)** Established by Mr. Morris Gastwirth of New York City, in honor of his sister, to provide a four-year tuition scholarship for a gifted and worthy student.

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- MORRIS GASTWIRTH SCHOLARSHIP (1956)** Established by Mr. Morris Gastwirth of New York City to provide tuition and maintenance assistance for gifted and needy students.
- THE ANNA GEIGER SCHOLARSHIP (1961)** Established by Mrs. Anna Geiger of Cleveland Heights, Ohio, to provide three scholarships for worthy and deserving students.
- GENERAL AND ANNIVERSARY SCHOLARSHIP FUND (1954)** This fund is maintained by undesignated contributions, and from persons who do not wish to have a special scholarship fund under their names, to our scholarship program. Awards will be made to deserving students on the basis of academic standing, all around ability, etc.
- HARRY GERBER SCHOLARSHIP (1959)** Established in memorial tribute to his father by Mr. Irving B. Gerber of Brookline, Massachusetts, to provide scholarship assistance to a visually handicapped student.
- MAX GERSON SCHOLARSHIP (1956)** Established by Mr. Max Gerson of New York City to provide tuition and maintenance assistance for worthy and deserving students.
- THELMA AND HENRY GIBBS SCHOLARSHIP (1960)** Established by Mr. Henry Gibbs of Saugus, Massachusetts, to provide scholarship assistance for a worthy and needy student.
- IRWIN A. GINSBERG MEMORIAL SCHOLARSHIP (1957)** Established by Mr. Benjamin Ginsberg of Chestnut Hill, Massachusetts, as a memorial tribute to his beloved son, to provide scholarship assistance to gifted and needy students who plan to enter the field of law.
- DR. BRIAN J. GINSBURG SCHOLARSHIP (1957)** Established by Dr. H. M. Ginsburg of Fresno, California, in honor of his son, to be awarded to a senior who is majoring in pre-medical studies.
- CLARA GINSBURG MEMORIAL SCHOLARSHIP (1960)** Established by Dr. H. M. Ginsburg of Fresno, California, to provide scholarship assistance to students concentrating in the field of music.
- SAM GIVEN SCHOLARSHIP (1960)** Established by Mr. Sam Given of Los Angeles, California, to provide scholarship assistance to a worthy and deserving student.
- NATALIE S. AND HYMAN S. GLASS SCHOLARSHIP (1960)** Established by Mr. Hyman Glass of Boston, Massachusetts, to provide scholarship assistance to a worthy and deserving student.
- GLEITSMAN FAMILY SCHOLARSHIP (1960)** Established by the Gleitsman Family of New York City, to provide scholarship assistance to deserving and worthy students.
- LIEUTENANT JOEL H. GOLDBERG SCHOLARSHIP FUND (1956)** Established by Mr. and Mrs. Sam A. Goldberg of Atlanta, Georgia, as a memorial tribute to their son, Joel, to provide scholarship assistance to worthy and deserving students.

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- GOLDEN CREME FARMS, INC., SCHOLARSHIP (1959)** Established by the Golden Creme Farms, Inc., of Los Angeles, California, as a partial tuition scholarship for needy and worthy students.
- JOHN GOLDEN SCHOLARSHIP AWARD (1959)** Established by the John Golden Fund, Inc., of New York City to provide a tuition scholarship for a worthy and needy student in the Theatre Arts Department majoring in dramatic writing and criticism.
- JACK A. GOLDFARB SCHOLARSHIP (1952)** Established by Mr. Jack A. Goldfarb of New York City as a maintenance scholarship for qualified students with limited financial means.
- BEN GOLDMAN SCHOLARSHIP (1958)** Established by Mr. Ben Goldman of New York City, to aid a deserving and worthy student by providing a tuition scholarship.
- MINNIE GOLDMAN AND ISADORE H. KAPLAN MEMORIAL SCHOLARSHIP (1952)** Established in memory of her mother and husband by Mrs. Blanche Kaplan of Chicago, Illinois, as a partial tuition scholarship.
- WILLIAM P. GOLDMAN SCHOLARSHIP (1958)** A four-year tuition scholarship, established by Mr. William P. Goldman of New York City, to aid a gifted and needy student.
- ELI D. AND MOLLIE L. GOODSTEIN SCHOLARSHIP (1960)** Established by Mr. Eli D. Goodstein of Fitchburg, Massachusetts, for scholarship assistance to a worthy and deserving student.
- LOUIS GORDON SCHOLARSHIP (1960)** Established by Louis Gordon of Marblehead, Massachusetts, to provide scholarship assistance to a worthy and deserving student.
- LOUIS W. GORDON SCHOLARSHIP (1960)** Established by Mr. Louis W. Gordon of Peabody, Massachusetts, to provide scholarship assistance for a worthy and needy student.
- NATHAN M. GORDON SCHOLARSHIP (1959)** Established as a memorial tribute by Mr. Louis Zipperman of Los Angeles, California, to provide scholarship assistance.
- GORT GIRLS FROCKS, INC. SCHOLARSHIP (1959)** Established by the Gort Girls Frocks, Inc. of New York City, to provide a partial scholarship to worthy and needy students.
- JOSEPH GOTTLIEB SCHOLARSHIPS (1961)** Established by Mr. Abe Gottlieb of New York City to provide scholarship assistance for worthy students.
- GOULED FOUNDATION, INC., SCHOLARSHIP (1955)** Established by the Felix and Cecile Gouled Foundation, Inc., of South Orange, New Jersey, to provide the opportunity for an undergraduate from the State of Israel to study at Brandeis University.

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- GREATER BOSTON CHAPTER BRANDEIS UNIVERSITY ALUMNI ASSOCIATION SCHOLARSHIP (1959)** To be awarded to a worthy student, with preference given to a resident of the Greater Boston area.
- GREATER NEW YORK CHAPTER OF THE BRANDEIS UNIVERSITY ALUMNI ASSOCIATION SCHOLARSHIP (1958)** A partial tuition scholarship established by the Greater New York Chapter of the Brandeis University Alumni Association to provide assistance to a worthy student from the Greater New York area.
- DAVID S. GREEN SCHOLARSHIP (1952)** A ten-year tuition scholarship given by Mr. Benjamin Green of Fall River, Massachusetts.
- MORRIS GREEN SCHOLARSHIP (1959)** Established by Mr. Morris Green of Chicago, Illinois, to provide scholarship assistance to gifted and needy students.
- CHARLES GREENBERG & SONS SCHOLARSHIP (1959)** Established by Charles Greenberg & Sons of New York City, through Mr. Leo Greenberg, to provide a four-year tuition scholarship for a gifted and needy student.
- HAYIM GREENBERG SCHOLARSHIP (1957)** Set up by the Pioneer Women of New York City, the Women's Labor Zionist Organization of America, Inc., out of its Hayim Greenberg Educational Fund. To be assigned to a woman senior or graduate student whose major interest is in service to Israel and the Jewish community.
- REBA AND MEYER B. GREENBERG SCHOLARSHIP FUND (1957)** Established by Mr. Meyer B. Greenberg of New York City, to provide scholarship assistance for gifted and needy students to fulfill their educational goals.
- SAMUEL GREENBERG SCHOLARSHIP (1954)** A partial tuition scholarship given by Mr. Samuel Greenberg of Westport, Connecticut, to aid a deserving student.
- ROBERT Z. GREENE SCHOLARSHIP (1961)** Established as a tribute to Mr. Robert Z. Greene of New York City, by his friends and associates. This scholarship is to provide assistance to deserving students.
- I. S. GREENFELD SCHOLARSHIP FUND (1953)** A ten-year partial tuition scholarship established by the relatives and friends of Mr. I. S. Greenfeld of New York City, in honor of his 60th birthday.
- I. M. GRELLER SCHOLARSHIP (1961)** Established by Mr. I. M. Greller of North Tarrytown, New York, to provide scholarship assistance for worthy students.
- SAMUEL GROB SCHOLARSHIP (1960)** Established by Mr. Samuel Grob of Lynn, Massachusetts, to provide scholarship assistance for a worthy and needy student.
- NANDOR GROSS SCHOLARSHIP (1958)** Established by Mr. Nandor Gross of Bronx, New York, to provide a tuition scholarship for a worthy and deserving student.
- RICHARD GROSS SCHOLARSHIP (1960)** A partial scholarship established by Mr. Richard Gross of Toledo, Ohio, to aid a worthy and deserving student.
- HAROLD M. GROSSMAN SCHOLARSHIP (1959)** Established by Mr. Harold M. Grossman of New York City, at a University function honoring Mr. Erwin S. Wolfson, to provide scholarship assistance.

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- ISIDORE GROSSMAN SCHOLARSHIP (1958)** Established by Mr. Isidore Grossman of New York City to provide a tuition scholarship for a worthy and needy student.
- KARIN GRUNEBaum SCHOLARSHIP (1960)** Established by M. Grunebaum of Lynnfield, Massachusetts, in memory of his wife, to assist worthy and deserving students.
- GULF COAST SCHOLARSHIP FROM FRIENDS OF BRANDEIS IN NEW ORLEANS (1957)** Established by friends of the University in New Orleans, Louisiana, and nearby areas as a tuition scholarship for a worthy and deserving student, with preference first to a student from New Orleans; and secondly, to one from the southeastern area of the United States.
- RALPH GUTMAN SCHOLARSHIP (1961)** Established by Mr. Ralph Gutman of New York City to provide scholarship assistance for a worthy student.
- MR. AND MRS. CHARLES GUTTMAN SCHOLARSHIP (1961)** Established by Mr. Charles Guttman of New York City, to provide scholarship assistance for worthy and deserving students.
- MOISSEI HALPERIN SCHOLARSHIP (1960)** Established by Dr. Joseph Weinrebe of Boston, Massachusetts in memory of his childhood teacher, Moissei Halperin, to provide financial assistance to students on the basis of merit and need.
- LEO HALPERN SCHOLARSHIP (1961)** Established by Mr. Halpern of Beverly Hills, California, to provide scholarship assistance for worthy and deserving students.
- MAURICE S. HANDLER SCHOLARSHIP (1960)** Established by Mr. Maurice S. Handler of New York City, to provide scholarship assistance to gifted and needy students.
- DOROTHY HARTMAN SCHOLARSHIP (1960)** Established by Mr. Jesse Hartman of New York City, in honor of Jacob A. Goldfarb, to provide scholarship assistance to gifted and needy students.
- ANNIE AND MAX HELLMAN MEMORIAL SCHOLARSHIP (1959)** A partial tuition scholarship established by Mr. and Mrs. Louis Hellman of Boston, Massachusetts, in memorial tribute to Mr. Hellman's parents, to be awarded to a deserving student.
- HERMAN J. HELLMAN SCHOLARSHIP (1960)** Established by Mr. Herman J. Hellman of New York City, to provide scholarship assistance to gifted and needy students.
- LOUIS AND SARA HELLMANN SCHOLARSHIP (1955)** A partial tuition scholarship established by Mr. and Mrs. Louis Hellmann of Boston, Massachusetts, in honor of their 30th wedding anniversary.
- PETER HERSHMAN MEMORIAL SCHOLARSHIP (1955)** Established by Mr. Samuel I. Hershman of New Haven, Connecticut, in memory of his son, Peter, to provide tuition assistance to a worthy student majoring in the field of science.
- HI CHARLIE ASSOCIATION SCHOLARSHIP (1951)** The Hi Charlie Association of Brandeis University has voted that a portion of the proceeds from the annual student revue "Hi Charlie" be used to aid a worthy student. Established in memory of Israel Ravreby, a member of the Class of 1952.

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- HIGHWAY TRAILER COMPANY SCHOLARSHIP (1958)** Established by the Highway Trailer Company of Wisconsin. This four-year tuition scholarship will provide assistance to a gifted and needy student.
- SOLOMON A. HIMELFARB MEMORIAL SCHOLARSHIP (1959)** Established by the Standard Pontiac, Inc., of College Park, Maryland, to provide tuition assistance to a student preferably from the Washington, D. C. area.
- MOREY AND HELEN HIRSCH SCHOLARSHIP (1960)** Established by Morey and Helen Hirsch, 70 Cleveland Road, Chestnut Hill, Massachusetts, to provide scholarship assistance to a worthy and deserving student.
- EDWARD H. HIRST SCHOLARSHIP (1959)** Established by Mr. Edward H. Hirst of New York City, at a University function honoring Mr. Erwin S. Wolfson, to provide a tuition scholarship for a worthy and deserving student.
- FLORENCE HOBERMAN PHILANTHROPIC LEAGUE SCHOLARSHIP (1953)** A partial tuition scholarship made possible by this League of Brooklyn, New York, to aid a deserving student.
- JOSEPH HORWICH SCHOLARSHIP TRUST FUND (1955)** Established through a bequest under the terms of the Will of Joseph Horwich of New York, to provide scholarship assistance to needy students.
- INFANTS', CHILDREN'S AND TEENS' WEAR BUYERS' ASSOCIATION SCHOLARSHIP (1956)** A tuition scholarship established by the Infants', Children's and Teens' Wear Buyers' Association of New York City, to aid a worthy and deserving student.
- INSTITUTE OF SCRAP IRON AND STEEL, INC., NORTHERN NEW ENGLAND CHAPTER SCHOLARSHIP (1957)** A grant from the Northern New England Chapter of the Institute of Scrap Iron & Steel, Inc., to provide scholarship assistance, with preference given to students in this area, who are related in some way to the industry.
- INTERNATIONAL LADIES' GARMENT WORKERS' UNION SCHOLARSHIP (1957)** An annual allocation for full maintenance and tuition set up for five years through Mr. David Dubinsky, President of the I. L. G. W. U., for gifted and needy students as a tribute to Justice Brandeis who had an enduring impact on the American labor movement.
- JACKSONVILLE, FLORIDA, SCHOLARSHIP (1958)** Created by the Brandeis University Club of Jacksonville, Florida, as a tuition and maintenance scholarship to aid a worthy student from the southeastern United States.
- JOSEPH JACOBSON SCHOLARSHIP (1961)** Established by Mr. Joseph P. Jacobson of New York City to provide scholarship assistance for worthy students.
- BELLE AND MAX JACOBY SCHOLARSHIP (1961)** Established by Mr. Max Jacoby of Woodside, New York, to provide scholarship assistance to gifted and needy students.
- FRANK JACOBY MEMORIAL SCHOLARSHIP (1954)** A tuition scholarship established by the Frank Jacoby Foundation of Bridgeport, Connecticut, to aid a gifted student in need of financial assistance.
- MEYER JAFFE SCHOLARSHIP (1961)** Established by Mr. Meyer Jaffe of Fall River, Massachusetts, in honor of The Hassenfeld Family, to provide scholarship assistance for worthy students.

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JAYMEE FASHIONS, INC. SCHOLARSHIP (1959) Established by Jaymee Fashions, Inc. of New York City, to provide tuition assistance to gifted and needy students.

JEWISH WELFARE FEDERATION OF HOLLYWOOD, FLORIDA, SCHOLARSHIP (1953)
A tuition scholarship established by the Board of Trustees of this organization, with preference to be given to a worthy graduate of the South Broward High School of Hollywood, Florida.

DR. AND MRS. EUGENE S. JOSEPHS SCHOLARSHIPS (1960) Established by Dr. and Mrs. Eugene S. Josephs of Forest Hills, New York in memory of Mrs. Josephs' parents, Abraham W. and Birdie G. Ast, to provide tuition assistance for a worthy student from the New York metropolitan area.

FELIX AND HELEN JUDA FOUNDATION SCHOLARSHIP (1959) Established by the Felix and Helen Juda Foundation of Los Angeles, California, to aid a gifted and needy student.

ANNIE AND PAUL JUNGER SCHOLARSHIP FUND (1951) Established by the Joseph H. Cohen and Sons Foundation of New York City, in memory of Annie and Paul Junger, for aid to gifted and needy students.

KEYV K. KAISERMAN SCHOLARSHIP TRUST (1960) Established by Mr. Keyv K. Kaiserman of Philadelphia, Pennsylvania, to provide scholarship help for worthy and deserving students.

NATHAN E. AND HARRY S. KAMENSKE MEMORIAL SCHOLARSHIP FUND (1951)
Established by the family of Messrs. Nathan E. and Harry S. Kamenske of Nashua, New Hampshire, to assist worthy students, preference to residents of Nashua first and then to residents of New Hampshire. If there is no suitable recipient from this area, the scholarship may be awarded to any other student selected by the Faculty Committee.

ABRAHAM AND SARAH KAPLAN SCHOLARSHIP (1960) Established by Mr. Fred Kaplan of Newton, Massachusetts, in memory of his father and mother for scholarship assistance to a worthy and deserving student.

ELIAH AND INA KAPLAN MEMORIAL SCHOLARSHIP FOR LT. JOSHUA KAPLAN (1959)
Established by Mr. and Mrs. Bart Lytton of Los Angeles, California, in honor of Mr. Lytton's stepfather and mother, to provide a tuition scholarship for a student majoring in the pre-medical studies.

EMILY R. AND KIVIE KAPLAN SCHOLARSHIP (1960) Established by Mr. and Mrs. Kivie Kaplan of Chestnut Hill, Massachusetts, to provide scholarship assistance for a worthy and needy student.

MRS. SAMUEL KAPPEL SCHOLARSHIP (1956) A scholarship fund in honor of Mrs. Samuel Kappel of Larchmont, New York, created by her daughters, to aid worthy and deserving students.

HARRY AND MARY KAROFKY SCHOLARSHIP (1960) Established by Mr. and Mrs. Alfred Karofsky and Mr. and Mrs. Mark Karofsky of Newton Centre, and Mr. and Mrs. Sydney Karofsky of Brookline, Massachusetts, in honor of their parents' 50th wedding anniversary, to provide scholarship assistance to worthy students.

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- MAX AND ELIZABETH KAROL SCHOLARSHIP (1957)** Established by Messrs. Ralph and Arthur Karol of Newton, Massachusetts, in honor of their parents' 40th wedding anniversary, to assist a needy and deserving student of the junior class.
- JAY AND MARIE KASLER FOUNDATION SCHOLARSHIP (1950)** A tuition scholarship founded by Mr. Jacob M. Stuchen of North Hollywood, California, in honor of Mr. and Mrs. Jay Kasler, for aid to a gifted boy or girl who might otherwise not enjoy the advantages of a college education.
- GARFIELD KASS SCHOLARSHIP (1953)** A tuition scholarship given by Mr. Garfield Kass of Washington, D. C., to assist a deserving student of outstanding academic ability.
- BARNED AND MOLLY KATZ SCHOLARSHIPS (1956)** Established by their sons, Charles and Edward, of Los Angeles, California, to provide scholarship assistance to worthy students.
- EMANUEL KATZ SCHOLARSHIP (1960)** Established by Mr. Emanuel Katz of New York City, to provide scholarship assistance for worthy and deserving students.
- MR. AND MRS. SAMUEL KATZ SCHOLARSHIP (1958)** Established in honor of his parents by Mr. Joseph M. Katz of Pittsburgh, Pennsylvania, to provide a tuition scholarship for a worthy and needy student.
- WILLIAM H. KATZ SCHOLARSHIP (1956)** Established by Mr. William H. Katz of New York City, in honor of Miss Evelyn Shea, these grants will be awarded to worthy students for tuition and maintenance assistance.
- ALBERT KAUFMAN SCHOLARSHIP (1958)** Established by Betty, Beverly, Robert and H. L. Kaufman in memorial tribute to their father of Palm Beach, Florida, as a tuition scholarship for worthy and deserving students.
- PHILIP KESSNER SCHOLARSHIP (1959)** Established by Mr. Philip Kessner of New York City, to provide a tuition scholarship for a gifted and needy student.
- HARRIS J. KLEIN SCHOLARSHIP (1958)** Established as a partial tuition scholarship by Mr. Harris J. Klein of Brooklyn, New York, to aid a worthy and deserving student.
- HERMAN AND MORRIS L. KLEIN SCHOLARSHIP (1956)** Established by Messrs. Herman and Morris L. Klein of New York City, to provide a tuition scholarship for a worthy and deserving student.
- JACK KLEIN SCHOLARSHIP (1960)** Established by Mr. Jack Klein of New York City, to provide scholarship assistance to gifted and needy students.
- NATALIE S. KLEIN SCHOLARSHIP (1956)** Established by Mr. Henry Klein of New York City, in memory of his beloved mother, to provide scholarship assistance for gifted and needy students.
- MR. AND MRS. ALLAN D. KLEINMAN SCHOLARSHIP (1958)** Established by Mr. and Mrs. Allan D. Kleinman of Shaker Heights, Ohio, as a full tuition scholarship for a worthy, deserving student.

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- KLEV-BROTHERS SCHOLARSHIP (1957)** Established by Messrs. Louis and Paul Kleven of Derry, New Hampshire, to provide a tuition scholarship for a worthy and deserving student.
- MAX KOHL SCHOLARSHIP (1959)** Established by Mr. Max Kohl of Milwaukee, Wisconsin, to provide scholarship assistance to worthy and deserving students.
- HARRY L. AND ETHEL F. KOVAR SCHOLARSHIP (1960)** Established through the will of the late Ethel F. Kovar to provide scholarship assistance or loans to worthy and needy students without regard to race, color, or creed or national origin; also to students of average rather than exceptional or outstanding scholastic achievement.
- DR. LOUIS KRAMER SCHOLARSHIP (1955)** A partial tuition scholarship established by Dr. Louis Kramer of Boston, Massachusetts, to assist a gifted and worthy student.
- ABRAHAM KRASNE SCHOLARSHIP (1953)** Established by Mr. Abraham Krasne of New York City, to provide a tuition scholarship for a worthy and deserving student.
- BERNARD, SOPHIE AND MARY KRASNOGOR SCHOLARSHIP (1960)** Established by a bequest from the Estate of Mary Krasnogor of Boston, Massachusetts, to provide scholarship assistance to a severely handicapped student.
- THE ADOLPH A. KREJTMAN SCHOLARSHIP (1961)** Established by Mr. Adolph A. Krejtmán of New York City to provide scholarship assistance to a worthy student.
- LOUIS KREMER SCHOLARSHIP (1960)** Established by Mr. Louis Kremer of Haverhill, Massachusetts, to provide scholarship assistance for a worthy and deserving student.
- MAX AND SAMUEL KRINSKY SCHOLARSHIP (1958)** A four-year tuition scholarship established by Messrs. Max and Samuel Krinsky of New York City, to aid a worthy and deserving student in the attainment of his educational goals.
- MRS. AND MRS. HYMAN KRIVOFF SCHOLARSHIP (1956)** Established by Mr. Hyman Krivoff of New Bedford, Massachusetts, to provide scholarship assistance for worthy students.
- HYMAN P. KUCHAI SCHOLARSHIP (1958)** Established by Mr. Hyman P. Kuchai of Harrison, New York, to offer tuition assistance to a gifted and needy student.
- CHARLOTTE U. AND HARRY W. LABOV SCHOLARSHIP (1959)** Established by Mr. and Mrs. Harry W. Labov of New Haven, Connecticut, to provide a tuition scholarship for a worthy and gifted student.
- CHARLES V. AND DORIS LABOVITZ SCHOLARSHIP (1960)** Established by Mr. Charles V. Labovitz of Swampscott, Massachusetts, to provide scholarship assistance for worthy and needy students.

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- LADO MUSIC SCHOLARSHIP (1951)** Established by this New York organization to assist a talented student of music to continue his study in any branch of instrumental music or composition.
- FANNIE FEIN LAKRITZ SCHOLARSHIP (1956)** A partial tuition scholarship in memory of Fannie Fein Lakritz for a worthy student interested in pre-medical studies, through the generosity of Joseph Fein and Edith Lakritz of New York City, and Zena Graham and Lorraine Friedman of Chicago, Illinois.
- SAMUEL LANDORF SCHOLARSHIP (1959)** Established by Mr. Samuel Landorf of New York City, to provide a scholarship assistance to gifted and needy students.
- LANDSMAN AND KATZ SCHOLARSHIP (1959)** Established by Landsman and Katz of New York City, in honor of Frances Simmons, to provide a four-year tuition scholarship for gifted and needy students.
- DR. EDWARD LANGNER MEMORIAL SCHOLARSHIP (1954.)** A tuition scholarship established by Mr. Jay Langner of New York City, in memory of his father.
- SAMUEL AND HATTIE W. LANSKI MEMORIAL SCHOLARSHIP (1953)** Established by Mr. Arthur Lanski of Chicago, Illinois, in memory of his parents, as a tuition scholarship to an outstanding student regardless of race, creed or color.
- SIMON G. LATIES SCHOLARSHIP (1958)** Established by Mr. Simon G. Laties of Peabody, Massachusetts, as tuition assistance for a worthy and deserving student.
- TESSIE AND LOUIS LAVEN SCHOLARSHIP (1959)** A partial scholarship established by Mr. and Mrs. Louis Laven of Longmeadow, Massachusetts, to aid a deserving student.
- LOUIS F. AND SELMA LEE SCHOLARSHIP (1961)** Established by Mrs. Selma Lee of Sarasota, Florida, to provide annually, a full tuition and maintenance scholarship for a needy female student of high academic qualifications in any course of studies taught at the University who has demonstrated capacity for leadership in Jewish activities.
- HYMEN LEFCOWITZ SCHOLARSHIP (1957)** Established by Mr. Hymen Lefcowitz of Eggertsville, New York, to provide tuition assistance for a gifted and needy student.
- DR. AND MRS. HENRY H. LERNER SCHOLARSHIP (1960)** Established by Dr. Henry H. Lerner of Boston, Massachusetts, to provide full tuition and scholarship assistance to a worthy and deserving student.
- LE ROI HOSIERY COMPANY, INC. SCHOLARSHIP (1959)** Established by the Le Roi Hosiery Company, Inc. of New York City, to provide a four-year tuition scholarship for a worthy and deserving student.
- THE LESTER FOUNDATION SCHOLARSHIP (1961)** Established by Mr. and Mrs. William M. Lester of Mountainside, New Jersey, to provide scholarship assistance to a worthy student.

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- LAWRENCE LEVER SCHOLARSHIP (1960) Established by Mr. Lawrence Lever of Rockville Centre, New York, to provide scholarship assistance to a gifted and needy student.
- ALLAN LEVIN MEMORIAL SCHOLARSHIP (1955) Established by Mr. and Mrs. Maurice Levin of Irvington, New Jersey, in memory of their son, to aid a gifted and worthy student.
- GEORGE AND MAURICE KEVIN SCHOLARSHIP (1955) Established by Messrs. George and Maurice Levin of Irvington, New Jersey, to provide financial assistance for deserving students, with preference to be given to students from the State of New Jersey.
- HARRY LEVINE SCHOLARSHIP (1959) Established by Mr. Harry Levine of Woodmere, New York City, to provide a tuition scholarship for a gifted and needy student.
- EVETA LEVINSON SCHOLARSHIP (1958) Established in her honor by Mr. and Mrs. Daniel G. Ross of New York City, to provide a full tuition scholarship for a worthy and deserving student.
- AUSTIN T. LEVY SCHOLARSHIPS (1958) Four full tuition scholarships established through the June Rockwell Levy Foundation by Mrs. Austin T. Levy of Harrisville, Rhode Island, with preference to be given to students from the State of Rhode Island.
- EDWARD C. LEVY FOUNDATION SCHOLARSHIP (1954) A tuition scholarship established by the Edward C. Levy Foundation of Detroit, Michigan, for aid to a student who might otherwise be unable to attend college.
- DR. STANLEY H. LEVY SCHOLARSHIP (1957) Established by Dr. Stanley H. Levy of Detroit, Michigan, for scholarship assistance to a student majoring in pre-medical studies.
- LIBERTY YOUNG MEN ASSOCIATION SCHOLARSHIP (1959) Established as an annual contribution by the members of this organization of Newark, New Jersey, to assist a deserving student from the northern New Jersey area.
- LICHTER FOUNDATION INC. SCHOLARSHIP (1958) A scholarship to support the Three-Two Program whereby students take their first three years at Brandeis and their last two years in an outstanding engineering school. Established by the Lichter Foundation Inc. of Cincinnati, Ohio.
- MR. AND MRS. HARRY LIDER SCHOLARSHIP (1960) Established by Mr. and Mrs. Harry A. Lider of South Dartmouth, Massachusetts, in honor of Mr. Hyman Krivoff, to provide assistance to a worthy and deserving student above the Freshman Class.
- CHARLES LIEBOWITZ SCHOLARSHIP (1960) Established by Mr. Charles Liebowitz of New York City, to provide scholarship assistance to worthy and deserving students.
- IDA LIFSCHULTZ SCHOLARSHIP (1958) Established by Mr. Sidney Lifschultz of Larchmont, New York, in memory of his beloved mother, to provide a tuition scholarship for a gifted and needy student.

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JACOB LINDENBAUM MEMORIAL SCHOLARSHIP (1958) Established by Mr. and Mrs. Harry Lindenbaum of Detroit, Michigan, in memory of their beloved brother, to aid needy and deserving students.

JACOB LINDENBAUM SCHOLARSHIP (1959) Established in memory of Jacob Lindenbaum of Detroit, Michigan, by his wife and daughter, to provide scholarship assistance to a gifted and worthy student.

SAMUEL LINDY AND LOUIS LINDY SCHOLARSHIP (1959) Established through a bequest from the Estate of Samuel Lindy of Chicago, Illinois, to provide tuition assistance to a gifted and needy student.

BERTRAND LIPPNER AND NORMA GROSS SCHOLARSHIP (1958) Established by Mr. and Mrs. Jordan Lippner of Yonkers, New York, as a four-year tuition scholarship to aid a worthy and deserving student.

MENO LISSAUER SCHOLARSHIP (1953) Tuition scholarship for ten years established by the Associated Metals and Minerals Corporation of New York City, in honor of the late Dr. Meno Lissauer, to be awarded to students outstanding in the field of chemistry.

ARNOLD LIVINGSTON MEMORIAL SCHOLARSHIP (1958) Established by Messrs. Joseph A., Norman and Theodore H. Livingston of New York City, in memory of their brother, through the Livingston Foundation, Inc., to provide a full tuition scholarship annually for a gifted and needy student.

SHUMER S. LONOFF SCHOLARSHIP (1961) Established by Mr. Shumer S. Lonoff of New York City, to provide scholarship assistance for a worthy and deserving student.

BEATRICE E. A. LOURIE MEMORIAL SCHOLARSHIP (1951) Established in her memory by Mr. Harry L. Lourie of Washington, D. C., as a partial tuition scholarship. Special consideration in making this award will be given to women students interested in the social sciences.

RABBI BENJAMIN B. LOWELL MEMORIAL SCHOLARSHIP (1953) Established by Mrs. Ethel Hammel of Havana, Cuba, in memory of Rabbi Benjamin B. Lowell who died while serving as the Rabbi of the Havana community.

MR. AND MRS. MAURICE H. LUKATCH SCHOLARSHIP (1960) Established by Mr. and Mrs. Maurice H. Lukatch of Swampscott, Massachusetts, to honor the memory of Harry Lukatch. This fund will provide partial scholarship assistance to a worthy student.

LOYAL LEAGUE PHILANTHROPIES SCHOLARSHIPS (1955) Five tuition scholarships established by the Loyal League Philanthropies of New York City, in honor of I. J. Fox, Albert J. Rosen, Estelle Rosenfield, Al Siegal and Irving Small. To be awarded to a male graduate of a private or public school in the Greater New York area; selection of recipient to be based on demonstrated scholastic ability and financial need.

DAVID LUMIANSKY SCHOLARSHIP (1960) Established by Mr. David Lumiansky of New Bedford, Massachusetts, in honor of Mr. Hyman Krivoff, to assist worthy and needy students.

DR. LESTER V. LYON SCHOLARSHIP (1959) Established by Dr. Lester V. Lyon of Beverly Hills, California to provide scholarship aid for gifted and worthy students.

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- THOMAS McMASTER SCHOLARSHIP (1961)** Established by Mr. Thomas McMaster of Detroit, Michigan, to provide scholarship assistance for a worthy student.
- MACK FOUNDATION SCHOLARSHIP (1957)** Established through Mr. Howard Mack of Hackensack, New Jersey, as a tuition scholarship to be awarded to gifted and needy students.
- MAN, LEVY AND NOGI, INC., SCHOLARSHIP (1960)** Established by Man, Levy and Nogi, Inc., of Scranton, Pennsylvania, to provide scholarship assistance for deserving and worthy students.
- MARY MANN SCHOLARSHIP (1955)** A partial tuition scholarship established by the Mary Mann Philanthropic League, Inc., of New York City, to aid a deserving student.
- SIDNEY AND RUTH MANOWITZ FOUNDATION SCHOLARSHIP (1959)** Established by this Foundation of Highland Park, Illinois, to provide scholarship assistance to a talented and worthy student majoring in music or the creative arts.
- ANNA GERTRUDE MANSHEL SCHOLARSHIP (1955)** Established in memory of his wife by Mr. Charles Manshel of Miami Beach, Florida, to assist gifted and needy students.
- FRANK MARCUCELLA SCHOLARSHIP (1957)** Established by Mr. Frank Marcucella of Malden, Massachusetts, to provide scholarship assistance for worthy and deserving students.
- MURIEL MARCUS FINE ARTS SCHOLARSHIP (1957)** Established by Mrs. Leonard Marcus of West Englewood, New Jersey, in memory of Lilly Oberman Brawer, to provide a tuition scholarship for a gifted and needy student concentrating in the area of fine arts.
- MOSES M. AND MARION MARCUSE FUND MERIT SCHOLARSHIP (1956)** A four-year \$5,000 subsidy established by Mr. and Mrs. Moses M. Marcuse of Long Island City, New York, and administered through the National Merit Scholarship Corporation, which enables a Merit Scholar to study at Brandeis University.
- ELY S. MARGOLIS SCHOLARSHIP (1961)** Established by Mr. Ely S. Margolis of New Rochelle, New York, to provide scholarship assistance for worthy students.
- MORRIS MARGOLIS SCHOLARSHIP (1960)** Established by Mr. Morris Margolis of New York City, to provide scholarship assistance to gifted and needy students.
- ERIC MARMOREK SCHOLARSHIP (1960)** A partial tuition scholarship established by Mr. Eric Marmorek of Boston, Massachusetts, in honor of Mr. Samuel Barron, Jr., to be awarded to a worthy and deserving student.
- HELEN MASSELL MUSIC SCHOLARSHIP (1955)** Established by Mr. Ben Massell of Atlanta, Georgia, in honor of his wife, Helen, to provide scholarship assistance to talented and worthy students majoring in the field of music.
- MR. AND MRS. A. I. MASSLER SCHOLARSHIP (1961)** Established by Mr. and Mrs. A. I. Massler of South Orange, New Jersey, to provide scholarship assistance to a worthy student.

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- MR. AND MRS. ROBERT J. MAYER SCHOLARSHIP (1959) Established by Mr. and Mrs. Robert J. Mayer of Los Angeles, California, to provide tuition assistance for gifted and needy students.
- MERKER COUNTER COMPANY SCHOLARSHIP (1960) Established by the Merker Counter Company of Haverhill, Massachusetts, to provide scholarship assistance to a worthy and deserving student.
- DAVID MERRICK SCHOLARSHIPS IN THEATRE ARTS (1960) Established by Mr. David Merrick of New York City, so that scholarship assistance may be provided to gifted and needy male students majoring in the field of theatre arts.
- MORRIS D. METZGER SCHOLARSHIP (1960) Established by Mr. Morris D. Metzger of New York City, to provide scholarship assistance to gifted and needy students.
- EDITH MICHAELS SCHOLARSHIP (1951) Established by the Board of Trustees of Brandeis University as a perpetual tuition scholarship in tribute to the pioneering zeal of the founder of the National Women's Committee.
- MELVIN MITCHELL SCHOLARSHIP (1961) Established by Mr. Melvin Mitchell of Hewlett Harbor, New York, to provide scholarship assistance for worthy students.
- MOGEN DAVID WINE SCHOLARSHIP (1955) Established by the Mogen David Wine Charitable Foundation of Chicago, Illinois, in honor of Mr. Abraham Feinberg, Chairman of the Board of Trustees of Brandeis University, to provide financial assistance for a student of great intellectual promise and marked economic need, who is a member of the senior class.
- WILLARD H. MOON SCHOLARSHIP (1960) A tuition and maintenance scholarship established by Mr. Willard H. Moon of Clarks Summit, Pennsylvania for a worthy and deserving student.
- BENJAMIN MORELL SCHOLARSHIP (1958) Established by Mr. Benjamin Morell of New York City, to provide tuition assistance for a gifted and needy student.
- JAMES ARTHUR MORSE SCHOLARSHIP (1961) Established by Mr. Sidney A. Wien of Atlanta, Georgia, in honor of his grandson, to provide scholarship assistance for a worthy student.
- MUSARTS SCHOLARSHIP (1954) A partial tuition scholarship established by the Musarts Club of Chicago, Illinois, to assist a gifted and needy student majoring in the field of creative arts.
- LEE V. MYERS SCHOLARSHIP (1959) Established by Mr. H. Herbert Myers of East Orange, New Jersey, in honor of his wife, to provide a four-year tuition scholarship for a worthy and deserving student.
- JACOB NARVA SCHOLARSHIP (1960) Established by Jacob Narva in honor of his grand-daughter Nancy for needy and worthy students.
- NATIONAL TELEFILM ASSOCIATES SCHOLARSHIP (1960) Established from the Sidney Hillman Award for the "Play of the Week" series which was won by the National Telefilm Associates, Inc., and turned over to Brandeis University for scholarship purposes.

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- MR. AND MRS. ABE NELSON SCHOLARSHIP (1960) A partial scholarship established by Mr. and Mrs. Abe Nelson of Seattle, Washington, to assist a needy and deserving student.
- MR. AND MRS. SIDNEY L. NELSON SCHOLARSHIP (1958) Established by Mr. and Mrs. Sidney L. Nelson of Seattle, Washington, to provide scholarship assistance to a needy and deserving student.
- DR. P. S. NEUWIRTH SCHOLARSHIP (1958) Established by Dr. P. S. Neuwirth of Peoria, Illinois, to offer scholarship assistance to gifted and needy students.
- W. H. NICHOLS COMPANY SCHOLARSHIP (1954) A partial tuition scholarship given by the W. H. Nichols Company of Waltham, Massachusetts, for the assistance of a deserving boy or girl.
- CLARA NICKOLL MEMORIAL SCHOLARSHIP (1954) Created by Mr. Ben Nickoll of Milwaukee, Wisconsin, in memory of his wife, to be used for assistance to worthy students.
- LOU NIERENBERG CORPORATION SCHOLARSHIP (1960) Established by the Lou Nierenberg Corporation of New York City, to provide scholarship assistance to gifted and needy students.
- WILLY NORDWIND SCHOLARSHIP (1954) A tuition scholarship given by Mr. Willy Nordwind of Lynn, Massachusetts, to provide financial assistance to a deserving student.
- J. N. NOVASEL SCHOLARSHIP (1961) Established by Mr. J. N. Novasel of Cleveland, Ohio, to provide partial scholarship assistance for worthy and deserving students.
- BEVERLY C. OHLANDT SCHOLARSHIPS (1959) Two full tuition scholarships established by the National Distillers Distributors Foundation with special consideration for employees or sons and daughters of employees of the National Distillers Products Corporation or franchised distributors for this Corporation, in honor of the President of the National Distillers Products Corporation.
- JOSEPH OTTENSTEIN SCHOLARSHIP (1951) A tuition scholarship to aid a promising student, established by Mr. Joseph Ottenstein of Washington, D. C.
- THE SADIE AND MORRIS PARIS SCHOLARSHIP FUND (1960) Established by Mr. and Mrs. David E. Casty of Boston, Massachusetts, to honor the memory of Mrs. Casty's father and mother. This fund will provide scholarship assistance to worthy and deserving students.
- LOIS C. PARLOW SCHOLARSHIP (1960) Established by Mr. Sydney Parlow of Swampscott, Massachusetts, as a gift to his wife, to provide scholarship assistance for a worthy and needy student.
- REUBEN L. PERIN SCHOLARSHIP (1958) Established by Mr. Reuben L. Perin of Scarsdale, New York, on the occasion of a University tribute to honor Mr. Morris L. Levinson, to provide a tuition scholarship for a gifted and needy student.

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PHI SIGMA DELTA NATIONAL FRATERNITY SCHOLARSHIP (1952) Established by the Student Scholarship Fund of the Phi Sigma Delta Fraternity of Chicago, Illinois, as a partial tuition scholarship.

DAVID AND BYRTHA PHILLIPS SCHOLARSHIP (1952) A ten-year partial tuition scholarship established by Mr. and Mrs. David Phillips of Miami Beach, Florida.

PLATT FOUNDATION SCHOLARSHIP (1958) Established by the Platt Foundation of Cambridge, Massachusetts, as tuition assistance for a worthy and deserving student.

HENRY PLEHN SCHOLARSHIP (1957) Established by Peter Pan Foundations Inc., through Mr. Henry Plehn of New York City, to provide scholarship assistance for gifted and needy students.

TED POLAND SCHOLARSHIP (1960) Established by Mr. Ted Poland of Swampscott, Massachusetts, to provide full tuition and scholarship assistance to a worthy and deserving student.

NORMAN H. POLSTER SCHOLARSHIP TRUST FUND (1960) Established by Mr. and Mrs. Lewis Polster of Cleveland, Ohio in honor of their father's 65th birthday. This trust will make it possible for youngsters of great potential but limited financial resources to obtain college education.

PREMIER ATHLETIC PRODUCTS CORP. SCHOLARSHIP (1961) Established by Messrs. Irving and Fred Rosenfeld of River Vale, New Jersey, to provide scholarship assistance for a worthy student who has demonstrated leadership capacities in athletic activities.

BARNEY PRESSMAN SCHOLARSHIP (1958) Established by Mr. Barney Pressman of New York City, as a tuition scholarship for four years for a talented and needy student.

SAMUEL PRESSON SCHOLARSHIP (1960) Established by Mr. Samuel Presson of Boston, Massachusetts, to provide scholarship assistance to a worthy and deserving student.

PROBUS NATIONAL CLUB SCHOLARSHIP (1949) Probus National, a civic club of business and professional men, has established a partial tuition scholarship to be awarded, without regard to race, creed or color, to an outstanding and deserving boy.

P. S. 10 MANHATTAN ALUMNI ASSOCIATION, INC. (1960) Established by the P. S. 10 Manhattan Alumni Association, Inc. of New York City, in memory of its founder, Abraham Greenberg, to provide scholarship assistance to worthy and deserving students.

T. M. QUIGLEY SCHOLARSHIP (1959) Established by F. W. Means & Company, of Chicago, Illinois, through Mr. Jack A. Quigley, to provide a tuition scholarship for a gifted and needy student.

SIDNEY RABINOWITZ SCHOLARSHIP (1959) Established by Mr. Sidney Rabinowitz of Boston, Massachusetts, to provide a tuition scholarship for a gifted and needy student.

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DAVID RAPOPORT SCHOLARSHIP (1959) Established by Mr. David Rapoport of New York City, as an expression of tribute to Mr. Erwin S. Wolfson, to provide tuition assistance to a gifted and needy student.

ARDEN RAPPAPORT MEMORIAL SCHOLARSHIP (1956) A tuition scholarship established in memory of their beloved daughter by Dr. and Mrs. Ben Z. Rappaport of Glencoe, Illinois, to provide assistance to a girl who has high scholastic ability, financial need, and superior qualities of campus citizenship.

RAPPAPORT FOUNDATION—MAX AND FRED RAPPAPORT SCHOLARSHIP (1956) Established by the Rappaport Foundation, through Messrs. Max and Fred Rappaport, of Minneapolis, Minnesota, to provide tuition and maintenance assistance for gifted and worthy students.

RATNER FAMILY SCHOLARSHIP (1951) Given by the Ratner Family of Cleveland, Ohio, for aid to deserving students.

BERNARD RAVITCH MUSIC FOUNDATION SCHOLARSHIP (1956) Established as a memorial tribute to Bernard Ravitch of New York City by his former students, friends and relatives to provide a partial tuition scholarship for a gifted and needy student majoring in music.

JEROME AND FLORA REGENSBURG FOUNDATION (1960) Established by the Board of Directors of the Jerome and Flora Regensburg Foundation to provide full scholarship assistance to a worthy and deserving student.

JOSEPH AND HELEN REGENSTEIN FOUNDATION SCHOLARSHIPS (1958) Established by Mrs. Joseph Regenstein of Chicago, Illinois, and Palm Beach, Florida, as a tribute to her beloved husband. Two full maintenance scholarships of \$2,500 each, covering tuition, room, board, books, and other student expenditures, open to graduates or undergraduates to be chosen on the basis of high quality in character and University citizenship.

HARRY REMIS SCHOLARSHIP (1960) Established by Mr. Harry Remis of Swampscott, Massachusetts, to provide scholarship assistance for a worthy and needy student.

REPLY-O-LETTER SCHOLARSHIP (1957) Established by the Reply-O-Letter Company of New York City through Mr. Charles A. Binger, to provide a partial tuition scholarship for a gifted and needy student.

JOSEPH W. RESS SCHOLARSHIP (1958) Established by Mr. Joseph W. Ress of Providence, Rhode Island, to offer scholarship assistance to a worthy and deserving student.

AUSTIN D. RHODES SCHOLARSHIP (1960) Established by the University for a resident of Waltham, Massachusetts, as a tribute to the distinguished incumbency of Mayor Austin D. Rhodes of Waltham, Massachusetts.

EMANUEL RICE MEMORIAL SCHOLARSHIP (1959) Established by Mrs. Emanuel Rice of Beverly Hills, California, as a memorial tribute to her late husband, for financial assistance to a worthy student.

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- RICHFELD FOUNDATION SCHOLARSHIP IN PHYSICS (1960)** A partial scholarship established by the Richfield Foundation of New York City, to assist a gifted and needy student whose major interest is in the field of physics.
- THE WALLINGFORD RIEGGER SCHOLARSHIP (1961)** Established in memory of Wallingford Riegger who had been assigned the 1961 Creative Arts Award in Music for his superb achievements in the area of music. This scholarship will provide scholarship assistance to a student specializing in the area of music composition.
- JOHN RIMER SCHOLARSHIP (1960)** Established by Mr. John Rimer of Marblehead, Massachusetts, to provide scholarship assistance for a worthy and needy student.
- GEN—MORT ROBBINS FOUNDATION SCHOLARSHIP (1955)** Established as a tuition scholarship by the Gen—Mort Robbins Foundation of Chicago, Illinois, to assist a worthy student.
- HAROLD CHARLES ROLFE MEMORIAL SCHOLARSHIP (1951)** Established by Mrs. R. A. Selig-Schlueter of Oak Ridge, Tennessee, in memory of her nephew, to be used for a partial tuition scholarship to a student regardless of race, creed or color.
- RONA LEE BLOUSE CORPORATION SCHOLARSHIP (1959)** Established by the Rona Lee Blouse Corporation of New York City, to provide scholarship assistance to gifted and needy students.
- JERRY ROSE MEMORIAL SCHOLARSHIP (1952)** A tuition scholarship established by members of the family and campers of Camp Echo Lark and their parents in memory of Jerry Rose. This scholarship is to be awarded to a needy student who exemplifies the outstanding citizenship and leadership qualities which characterized Jerry Rose during his lifetime.
- ROBERT ROSE SCHOLARSHIP (1960)** Established by Mr. Robert Rose of Swampscott, Massachusetts, to provide scholarship assistance for a worthy and deserving student.
- CARL ROSEN SCHOLARSHIP (1958)** Established by Mr. Carl Rosen of Waltham, Massachusetts, to provide scholarship assistance to a deserving student.
- JOSEPH AND GERTRUDE ROSEN SCHOLARSHIP (1958)** Established as a partial tuition scholarship by Mr. and Mrs. J. R. Rosen of Brookline, Massachusetts, to assist a worthy commuting student from the Boston area, who demonstrates marked academic promise.
- SAMUEL ROSEN FAMILY FOUNDATION SCHOLARSHIP (1961)** Established by Mr. Samuel Rosen of Providence, Rhode Island, in honor of Phyllis R. Brown, to provide scholarship assistance for worthy students.
- HENRY ROSENBERG SCHOLARSHIP (1959)** Established by Mr. Henry Rosenberg of Fox Point, Wisconsin, to provide scholarship assistance for gifted and needy students.
- KARP AND RACHAEL ROSENBERG MEMORIAL SCHOLARSHIP FUND (1959)** Established by Mr. Jock Rosenberg of Pittsburgh, Pennsylvania through the Karp and Rachael Rosenberg Foundation, in memory of his parents, for scholarship assistance to worthy and deserving students.

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MAX M. ROSENBERG SCHOLARSHIP (1960) Established by Mr. M. Rosenberg of New York City, to provide scholarship assistance to worthy and deserving students.

ROSENBERG FOUNDATION SCHOLARSHIP (1951) Preference in making this tuition award, established by the Rosenberg Foundation of New York City, is to go to an Israeli student of outstanding promise.

BENJAMIN ROSENBLUM SCHOLARSHIP (1961) Established by Mrs. Lillian Kratter of New York City as a memorial tribute to her father, to be assigned to a gifted female student towards her tuition.

JOSEPH AND NORMAN ROSENFELD SCHOLARSHIP (1960) Established by Messrs. Joseph and Norman Rosenfeld of Marblehead, Massachusetts, to provide scholarship assistance for a worthy and deserving student.

CHARLES ROSENTHAL SCHOLARSHIP (1952) Established by his children in honor of the 75th birthday of Mr. Charles Rosenthal of New York City, as a partial tuition scholarship, and further augmented in honor of his 80th birthday.

MRS. MOREY ROSENTHAL SCHOLARSHIP (1959) Established by Mrs. Morey Rosenthal of Sherman Oaks, California, to provide a tuition scholarship to a gifted and needy student.

CHARLES ROSS SCHOLARSHIP (1955) Established as a partial tuition scholarship by Mr. Charles Ross of Chicago, Illinois, to assist a deserving student.

CHESTER M. ROSS SCHOLARSHIP (1958) Established by Mr. Chester M. Ross of Harrison, New York, to provide a full tuition scholarship for a gifted and deserving student.

LOUIS AND EDYTHE ROSS SCHOLARSHIP (1960) Established by Mr. and Mrs. L. Ross of Brookline, Massachusetts to assist a worthy and deserving student.

MITCHELL M. ROSSER SCHOLARSHIP (1960) Established by Mr. Sidney L. Kaye of Boston, Massachusetts, to provide scholarship assistance for worthy and deserving students.

MORRIS ROSTAU SCHOLARSHIP (1958) Established by Mrs. Morris Rostau of Brookline, Massachusetts, in memorial tribute to her husband, for scholarship aid to worthy and needy students who might not otherwise be able to take advantage of a college education.

MR. AND MRS. JOSEPH ROTH SCHOLARSHIP (1961) Established by Mr. and Mrs. Joseph Roth of Syracuse, New York, to provide scholarship assistance for a worthy student.

SAMUEL ROTHBERG SCHOLARSHIP (1952) Established by Mr. Samuel Rothberg of Atlanta, Georgia, for scholarship aid to a deserving student.

SAMUEL ROTHBERG SCHOLARSHIP (1958) A ten-year tuition scholarship established by the devoted friends of a generous philanthropist of Peoria, Illinois, in tribute to his unstinted community service.

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- MR. AND MRS. ALBERT ROTHENBERG SCHOLARSHIP (1961) Established by Mr. and Mrs. Albert Rothenberg of New York City to provide scholarship assistance for a worthy student.
- HARRY ROTHMAN SCHOLARSHIP (1958) Established by Mr. Harry Rothman of New York City as a four-year tuition scholarship for a gifted and needy student.
- ARTHUR J. ROTHSCHILD SCHOLARSHIP (1956) Established through a bequest under the terms of the Will of Arthur J. Rothschild of Los Angeles, California, for scholarship assistance to a deserving student.
- MILTON ROTTMAN SCHOLARSHIP (1960) Established by Mr. Milton Rottman of Bridgeport, Connecticut for gifted and needy students.
- ROXBURY FUND SCHOLARSHIP (1958) Established as a partial tuition scholarship by the Roxbury Fund of Chicago, Illinois, for a student preparing for the field of physical science or engineering.
- JAMES RUDERMAN SCHOLARSHIP (1960) Established by Mr. James Ruderman of New York City, to assist deserving students.
- MR. AND MRS. BENJAMIN RUDNICK SCHOLARSHIP (1959) Established in honor of his 75th birthday by Mr. Benjamin Rudnick of Miami Beach, Florida, to provide a tuition scholarship for a worthy and deserving student.
- RUDNICK CHARITABLE FOUNDATION, INC., SCHOLARSHIP (1953) Created by the Rudnick Charitable Foundation, Inc., of Boston, Massachusetts, in memory of Abraham G. Rudnick, to provide tuition assistance to a gifted and worthy student.
- ROSE AND MICHAEL RUDNICK SCHOLARSHIP (1956) Established in honor of the 70th birthday of Mr. Michael Rudnick of Brookline, Massachusetts, by his children as a partial tuition scholarship for a gifted and needy student.
- LOUIS RUSSEK SCHOLARSHIP (1959) Established by Mr. Louis Russek of New York City, to provide a three-year tuition scholarship for a gifted and needy student.
- ABRAM L. SACHAR FOREIGN STUDY AWARD (1961) Established in honor of the President of Brandeis University by Mr. and Mrs. Marvin A. Kratter of New York City, to be assigned to a student in his or her Junior year for the purpose of studying abroad.
- SACHS FUND SCHOLARSHIP (1958) Established by the Sachs Fund of St. Louis, Missouri, through Mr. S. C. Sachs, to provide a tuition scholarship for a worthy and deserving student.
- ABRAM AND MABEL SALTER SCHOLARSHIP (1959) A tuition scholarship established by Mr. and Mrs. Abram Salter of Brookline, Massachusetts, to be used for a gifted and needy student from the State of Massachusetts.
- MAURICE SALTZMAN SCHOLARSHIP (1958) Established by the Saltzman Foundation of Cleveland, Ohio, on the occasion of a University tribute to Mr. Alfred Benesch, to provide two tuition scholarships for worthy and needy students.

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- SAM SAMPLINER SCHOLARSHIP (1959)** Established by Mr. Sam Sampliner of Cleveland, Ohio, to provide scholarship assistance to a needy and worthy student.
- ALBERT J. SANDLER SCHOLARSHIP (1960)** Established by Mr. Albert J. Sandler of Marblehead, Massachusetts, to provide partial scholarship assistance to a worthy and deserving student.
- ETTA AND JACOB SANG SCHOLARSHIP (1951)** Established by the Sang Foundation of Chicago, Illinois, to provide a tuition scholarship for a deserving and gifted student.
- STEPHANIE AND LEW SARNOFF SCHOLARSHIP (1961)** Established by Mr. and Mrs. Sarnoff of Katonah, New York, to provide scholarship assistance to a worthy student.
- MYER SAXE SCHOLARSHIP (1959)** Established by Mr. Myer Saxe of Kennebunk, Maine, to provide a tuition scholarship for a gifted and needy student.
- CELIA AND JACOB SCHAEFFER SCHOLARSHIP (1961)** Established by Mr. Jacob Schaeffer of New York City, to provide a partial tuition scholarship for a worthy and deserving student.
- SOL SCHATZ SCHOLARSHIP (1960)** Established by Mr. Sol Schatz of New York City, to provide scholarship assistance to worthy and deserving students.
- THEODORE SCHEFT SCHOLARSHIP (1960)** Established by Mr. Theodore Scheft of Swampscott, Massachusetts, to provide scholarship assistance for a worthy and needy student.
- LEONA SLAWSBY SEIDLER SCHOLARSHIP (1960)** Established by Mr. I. L. Seidler of Swampscott, Massachusetts, to assist a worthy and deserving student.
- WILLIAM E. SCHRAFFT AND BERTHA E. SCHRAFFT CHARITABLE TRUST SCHOLARSHIP (1961)** Established by the William E. Schrafft and Bertha E. Schrafft Charitable Trust as an unrestricted undergraduate scholarship.
- SAMUEL SCHULMAN SCHOLARSHIP (1959)** Established at a University function in his honor by Mr. Jack A. Goldfarb of New York City, to provide scholarship assistance to needy and worthy students.
- DAVID SCHWARTZ SCHOLARSHIP (1958)** Established by Mr. David Schwartz of New York City, to provide a four-year tuition scholarship for a gifted and needy student.
- THE HENRY SCHWARTZ SCHOLARSHIP (1961)** Established by Mr. Henry Schwartz of Farmingdale, New York, to provide scholarship assistance to a worthy student.
- ROBERT L. SCHWARTZ MEMORIAL SCHOLARSHIP (1951)** A ten-year scholarship given in memory of Robert L. Schwartz by his wife, Mrs. Rose Schwartz of Miami Beach, Florida, for aid to a promising student.
- PETER J. SCHWEITZER FOUNDATION SCHOLARSHIP TRUST (1959)** Established by the Peter J. Schweitzer Foundation, Inc., of New York City, to provide scholarship assistance, with preference to those majoring in the science curriculum.

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SCRAP AGE SCHOLARSHIP (1952) A partial tuition scholarship established by the Scrap Age Press through Mr. M. D. Oberman of Springfield, Illinois.

SEA FROST FISH COMPANY SCHOLARSHIP (1960) Established by Messrs. Morris Entis and Isadore Novack of Boston, Massachusetts, to provide scholarship assistance to a worthy and deserving student.

BELLA AND HYMAN SEGAL MEMORIAL SCHOLARSHIP FUND (1951) Created by the Empire Furniture Association, the income, plus a portion of the principal if necessary, to be used for a tuition scholarship for a deserving student.

MITCHELL M. SEGAL SCHOLARSHIP (1959) Established by Mr. Mitchell M. Segal of North Andover, Massachusetts, to provide a tuition scholarship for a deserving and gifted student.

LEONA SLAWSBY SEIDLER SCHOLARSHIP (1960) Established in honor of Leona Slawsby Seidler by her husband, Mr. I. L. Seidler of Swampscott, Massachusetts, to assist a worthy and deserving student.

RALPH SEPLOW SCHOLARSHIP (1957) Established by Mr. Ralph Seplow of New York City, to provide scholarship assistance to worthy and deserving students.

MR. AND MRS. SIMON SHAIN SCHOLARSHIP (1959) Two tuition scholarships established by Mr. and Mrs. Simon Shain of West Newton, Massachusetts, for gifted and needy students.

SHAPIRO BROS. FACTORS CORP. SCHOLARSHIPS (1956) Established by the Shapiro Scholarship Fund, Inc., through the Shapiro Foundation of New York City, to provide scholarship assistance to not less than five students, based on financial and scholastic ability.

JOSEPH SHAPIRO MEMORIAL SCHOLARSHIP (1960) Established by Mr. and Mrs. Eugene Shapiro of Prairie Village, Kansas, to provide scholarship assistance for students of great intellectual promise who plan to go on into graduate work.

MR. AND MRS. MAXWELL SHAPIRO SCHOLARSHIP (1959) Established as a four-year tuition scholarship by friends of Mr. and Mrs. Maxwell Shapiro of Boston, Massachusetts, in honor of their marriage, to provide assistance for needy and worthy students.

BISHOP BERNARD J. SHEIL SCHOLARSHIP (1958) A full tuition scholarship set up by Mr. J. L. Keeshin of Chicago, Illinois, in honor of the 30th anniversary of this distinguished Catholic prelate's service as Bishop.

ARANT H. SHERMAN SCHOLARSHIP (1956) A partial tuition scholarship established by Mr. Arant H. Sherman of Davenport, Iowa, for a student who exemplifies qualities of good citizenship and potential community leadership.

JENNIE AND BERNARD SHIVEK SCHOLARSHIP (1960) Established by Mr. and Mrs. Bernard Shivek of Chestnut Hill, Massachusetts, to provide scholarship assistance to a worthy and deserving student.

JACOB W. SHOUL AND IRVING BACKMAN SCHOLARSHIP (1960) Established to provide scholarship assistance to a worthy and deserving student.

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- FRANK SHU SCHOLARSHIP (1958)** A contribution from Mr. Frank Shu of Sao Paulo, Brazil, to provide tuition and maintenance assistance for gifted and needy students.
- HERMAN SHULMAN SCHOLARSHIP (1956)** Established by Mr. Herman Shulman of Lawrence, Long Island, New York; President of Rex Electric Mfg. Corp. of New York, for a student who will best further the interests of brotherhood amongst university students.
- MEYER N. SHWARTZAPPEL SCHOLARSHIP (1960)** Established by Mr. Meyer N. Schwartzappel of New York City, to provide scholarship assistance to gifted and needy students.
- LOUIS SIEGAL MEMORIAL SCHOLARSHIP (1959)** Established in memorial tribute by his children Messrs. Arthur and Irving Siegal, and Mrs. Irene Swartz of Chestnut Hill, Massachusetts, and Mr. Bernard Siegal of Mattapan, Massachusetts, to provide scholarship assistance to gifted and needy students.
- MAX SIEGEL SCHOLARSHIP (1959)** Established by Mr. Max Siegel of New York City as a tuition scholarship for a gifted and needy student.
- MR. AND MRS. JULIAN M. SIEROTY SCHOLARSHIP (1960)** Established by Mr. and Mrs. Julian M. Sieroty of Beverly Hills, California, to provide scholarship assistance to a worthy and deserving student.
- HARVEY SILBERT SCHOLARSHIP (1959)** Established by Mr. Harvey Silbert of Beverly Hills, California, to provide a tuition and maintenance scholarship for a gifted and needy student.
- ROSE BRESKIN SILVER SCHOLARSHIP (1959)** Established by Mr. Jacob Silver of Chicago, Illinois, in memory of his wife, to provide scholarship assistance to a gifted and needy student.
- SADYE SILVER MEMORIAL SCHOLARSHIP (1954)** A tuition scholarship given by Mr. Morris Silver of Manchester, New Hampshire, in memory of his wife, Sadye, to provide financial assistance to a deserving student from the State of New Hampshire.
- MRS. MARY SIMON SCHOLARSHIP (1960)** Established in honor by her husband, Mr. Carl Simon of Newton, Massachusetts, and their children, to provide scholarship assistance to a worthy and deserving student.
- WILLIAM H. SIMON-FANCHON SIMON FOUNDATION SCHOLARSHIP (1961)** Established by Mr. and Mrs. William H. Simon of Los Angeles, California, in memory of Fanchon Simon's sister, Mrs. Leah Strauss, to provide scholarship assistance for worthy students.
- CHARLES J. SINGER SCHOLARSHIP (1957)** Established in honor of Mr. Charles J. Singer of Chicago, Illinois, by his friends, associates and co-workers in the men's, women's and children's wear industry. This tuition scholarship will be awarded to a worthy student from the Chicago area, who is majoring in economics.
- PETER E. SISKIND SCHOLARSHIP (1961)** Established by Mr. Peter E. Siskind of Scarsdale, New York, to provide scholarship assistance for worthy and deserving students.

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EDWARD AND SADIE L. SISSON SCHOLARSHIP (1960) Established by Mr. and Mrs. Edward Sisson of Brookline, Massachusetts, to provide tuition assistance for worthy and deserving students.

ROBERT SLOSBERG SCHOLARSHIP (1959) Established by Mr. Robert Slosberg of Olivette, Missouri, to provide scholarship assistance for a worthy and gifted student.

ELKIN AND BESSIE B. SMITH SCHOLARSHIP (1957) Established by Mr. and Mrs. Elkin Smith of Norwich, Connecticut, for scholarship assistance to gifted and needy students.

JOHN HALL SMITH MEMORIAL SCHOLARSHIP (1950) A full tuition scholarship established by the Board of Trustees of Brandeis University in memory of the founder of Middlesex University, for his direct descendants.

WILLIAM A. SMITH SCHOLARSHIP (1961) Established in honor of Mr. and Mrs. Leopold L. Meyer by Mr. William A. Smith of Houston, Texas, to provide scholarship assistance, with preference given to students from Houston, Texas, who have had the misfortune of being deprived of a parent or parents.

SOLAR FOUNDATION SCHOLARSHIP (1960) Established in memory of Mr. Sol H. Friedman of Cleveland, Ohio, to provide scholarship assistance to a worthy and deserving student.

PHILIP AND SARAH SOLOMON SCHOLARSHIP (1960) Established by Mr. Philip Solomon of New York in honor of his friend Jacob Berg, to provide scholarship assistance for students interested in our Yiddish courses, especially those majoring in Near Eastern and Judaic or Hebrew Studies.

BENJAMIN SONNENBERG SCHOLARSHIP (1960) A four-year tuition scholarship to aid gifted and needy students.

SOUTH CAROLINA ASSOCIATION B'NAI B'RITH SCHOLARSHIP (1952) Established as a tuition scholarship by the South Carolina Association of B'nai B'rith Lodges for a student from the State of South Carolina, regardless of creed or origin.

NATE B. AND FRANCES SPINGOLD SCHOLARSHIP (1959) Two full tuition scholarships established by Mrs. Nate B. Spingold of New York City, in loving tribute to her late husband, vice-president of Columbia Pictures.

STAR MARKET COMPANY SCHOLARSHIP (1960) Established by Mr. Stephen P. Mugar of Newtonville, Massachusetts, for scholarship assistance to a worthy and deserving student.

MAX AND DORIS L. STARR SCHOLARSHIP (1960) Established by Mr. Max Starr of Boston, Massachusetts, to provide scholarship assistance to worthy and deserving students.

ISADORE AND SOPHIE STAVIS SCHOLARSHIP (1960) Established by Mr. and Mrs. Isadore Stavis of Newton Centre, Massachusetts, to provide scholarship assistance to worthy and deserving students.

ETHAN STAVITSKY SCHOLARSHIP (1950) A partial tuition scholarship established by Mr. Michael Stavitsky of Newark, New Jersey, as a memorial to his son, Ethan, to aid a deserving student.

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- STEIN, STEIN AND ENGEL SCHOLARSHIP (1956) Established through Mr. Sam Stein of Jersey City, New Jersey, for partial scholarship assistance for a worthy and deserving student.
- CELIA AND OSCAR STERMAN SCHOLARSHIP TRUST FUND (1960) Established by Mr. and Mrs. Oscar Sterman in honor of their 50th Wedding Anniversary, to provide for needy students who are interested in Judaic Studies.
- JEAN STERNLIGHT SCHOLARSHIP (1960) Established by the late Jean Sternlight of New York City, to provide scholarship assistance for underprivileged and needy students with high scholastic standing.
- STILLER FABRICS, INC. SCHOLARSHIP (1960) Established by the Stiller Fabrics, Inc. of New York City, to provide scholarship assistance to gifted and needy students.
- STONE AND SIMONS SCHOLARSHIP (1958) Established by Stone and Simons Advertising, Inc., of Detroit, Michigan, for partial tuition assistance for a worthy and deserving student.
- MRS. ETHEL HART STRAUSS SCHOLARSHIP (1959) A partial scholarship established by Mrs. Ethel Hart Strauss of Stamford, Connecticut, to assist a deserving student.
- JAMES STRIAR AND FAMILY SCHOLARSHIP (1960) Established by the Eastland Woolen Corporation through Mr. Bernard Striar of New York City, to provide scholarship aid to gifted and needy students.
- FRANK STRICK MEMORIAL SCHOLARSHIP (1958) Established as a memorial tribute by Mr. Sol Katz of Philadelphia, Pennsylvania, to provide a tuition scholarship for four years for a deserving and worthy student.
- M. STROH SCHOLARSHIP (1960) A tuition and maintenance scholarship established by Mr. M. Stroh of New York City, to assist a worthy and deserving student.
- MORRIS AND SARAH STRUHL MEMORIAL SCHOLARSHIP (1956) Established by Mr. and Mrs. Archie Struhl and Mr. and Mrs. Louis Struhl of Jersey City, New Jersey, to provide a tuition scholarship for deserving and needy students from the State of New Jersey, with preference given to a resident of Jersey City.
- MAX STUART MEMORIAL SCHOLARSHIP (1957) Established by Messrs. Charles and David Stuart of Rockville Centre, New York, in memorial tribute to their beloved father, to provide a partial tuition scholarship for a gifted and needy student.
- SUPERMARKET MERCHANDISING SCHOLARSHIP (1950) A tuition and maintenance scholarship for a student of high academic standing and an interest in merchandising as a career, given by Supermarket Merchandising of New York.
- EDWARD M. SWARTZ SCHOLARSHIP (1959) Established by Mr. Edward M. Swartz of Boston, Massachusetts, to provide a four-year tuition scholarship for a talented and needy student.

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MICHAEL TACKEFF SCHOLARSHIP TRUST FUND (1956) Established by Mr. Michael Tackeff of Boston, Massachusetts, the income is to be used for scholarship assistance to gifted and needy students.

MR. AND MRS. A. D. TAFF SCHOLARSHIP (1960) Established by Mr. and Mrs. A. D. Taff of Beverly Hills, California, to provide scholarship assistance to a worthy and deserving student.

SIDNEY A. TARRSON SCHOLARSHIP (1959) Established by Mr. Sidney A. Tarrson of Chicago, Illinois, to provide scholarship assistance to a talented and deserving student.

SAMUEL H. THAL SCHOLARSHIP (1959) A full tuition and maintenance scholarship established by the Joseph Thal Family Foundation, through Mr. Joseph Thal, as a memorial tribute to his brother.

TIDY HOUSE PAPER CORPORATION SCHOLARSHIP (1952) A tuition scholarship established by Mr. David Adlman of the Tidy House Paper Corporation of New York, preferably to a student whose curriculum will prepare him for a future in the supermarket industry.

HARRY AND LIBBIE TOBE SCHOLARSHIP (1960) Established through the Will of Libbie Tobe of Pittsburgh, Pennsylvania, for scholarship assistance to a student majoring in the field of science.

IRVING N. TOLKIN SCHOLARSHIP (1959) Established by Mr. Irving N. Tolkin of New York City, to provide a tuition and maintenance scholarship for a gifted and needy student.

DAVID TRATTNER SCHOLARSHIP (1959) Established by the late Mr. David Trattner of Beverly Hills, California, to offer scholarship assistance to worthy and deserving students.

HYMAN TREISMAN SCHOLARSHIP TRUST FUND (1955) Under the terms of the Will of Hyman Treisman of Manchester, New Hampshire, the income plus a portion of the principal of the bequest is to be awarded as scholarship assistance to a deserving student.

TRI-CITIES SCHOLARSHIP TRUST FUND (1957) Created by gifts of Brandeis supporters in Albany, Schenectady, and Troy, to provide scholarship assistance, with preference given to students from the Tri-Cities area. Further augmented at a University affair honoring Mr. Samuel Aronwitz.

TROJAN LODGE #1098 F. & A.M. MEMORIAL SCHOLARSHIP FUND (1950) Established in memory of Dr. Julius M. Weinberger, Samuel T. Siegel, all Past Masters, and all departed Brethren.

JEANETTE UDELL SCHOLARSHIP (1959) Established by Mr. and Mrs. Seymour Udell of Sands Point, Long Island, in honor of his mother, to provide scholarship assistance to a gifted and deserving student.

THE JACK UNGER SCHOLARSHIP (1961) Established by Mr. Jack Unger of New York City to provide scholarship assistance for worthy students.

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- WILLIAM AND RACHEL UNGERMAN MEMORIAL SCHOLARSHIP (1953)** Established in memory of their parents by Dr. Arnold H., Dr. Milford S., and Mr. Irvine E. Ungerman of Tulsa, Oklahoma, to provide scholarship assistance to a deserving student athlete.
- UNITED JEWISH CHARITIES OF GREATER MUSKEGON SCHOLARSHIP (1956)** A contribution from this organization of Muskegon, Michigan, designated for scholarship assistance to worthy and deserving students.
- UNITED ORDER OF TRUE SISTERS—JOHANNA LODGE No. 9 SCHOLARSHIP (1956)** A partial tuition scholarship contributed by this organization of Chicago, Illinois, to assist a visually handicapped student.
- UNIVERSITY SCHOLARSHIP FOR ISRAELI ARAB STUDENTS (1957)** Two full maintenance and tuition scholarships established by Brandeis University for qualified Israeli Arab students who have been brought to this country through the generosity of the Samuel Rubin Foundation of New York City.
- UNIVERSITY SCHOLARSHIP FOUNDATION SCHOLARSHIP (1960)** Established by the University Scholarship Foundation of Beverly Hills, California, to provide scholarship assistance to a worthy and deserving student.
- SAM VER VEER MEMORIAL SCHOLARSHIP (1956)** A partial tuition scholarship established through the Virginia V. and Sam E. Binswanger Fund of Richmond, Virginia, in memory of Mrs. Binswanger's father.
- MICHAEL VICTOR SCHOLARSHIP (1951)** A tuition scholarship to give a college opportunity to a student who might otherwise be unable to have this advantage, contributed by Mr. Benjamin Victor of Springfield, Illinois.
- BEN VOLID MEMORIAL FUND SCHOLARSHIP (1957)** Established in his memory by Mr. Peter Volid of Chicago, Illinois, to provide a full tuition scholarship, preference to be given to a student majoring in economics and preparing for a business career.
- BIRDIE WAGNER SCHOLARSHIP (1950)** A grant to aid deserving students, contributed by Mr. Isaac Wagner of Chicago, Illinois, in honor of his wife.
- ESTHER AND SYLVAN WAGNER SCHOLARSHIP (1951)** Established by Mr. and Mrs. Sylvan Wagner of Chicago, Illinois, as a partial tuition scholarship to assist a worthy and needy student.
- ELLEN AND HAROLD WALD SCHOLARSHIP (1953)** A partial tuition scholarship established by Mr. and Mrs. Harold Wald of Brookline, Massachusetts, to assist a worthy student who might otherwise be unable to attend college.
- DAVID I. WALSH—JOSEPH M. LINSEY SCHOLARSHIP (1956)** In memory of David I. Walsh, and in honor of Joseph M. Linsey, this tuition scholarship has been given by their friends in Massachusetts. To be awarded to a student who, in the opinion of the Faculty Committee, exemplifies the broad spirit of understanding and liberal ideals of both men.
- WALTHAM SCHOLARSHIPS (1948)** Two tuition scholarships created by the Board of Trustees of Brandeis University for worthy graduates of high schools in Waltham, Massachusetts.

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- MR. AND MRS. ELLIS H. WARREN SCHOLARSHIP (1957) Established by the late Mr. Ellis H. Warren of Flint, Michigan, to provide two full tuition scholarships for gifted and needy students.
- MAXWELL WARSHAW SCHOLARSHIP (1960) Established by Mr. Maxwell Warshaw of New York City, to be awarded as scholarship assistance for worthy and deserving students.
- NATHAN AND ZIPPORAH WARSHAW SCHOLARSHIP (1955) A partial tuition scholarship established in memory of William Warshaw by Mr. and Mrs. Nathan Warshaw of New York City, to aid a deserving student.
- JACK WASSERMAN SCHOLARSHIP (1958) Established by Mr. Jack Wasserman of New York City to provide scholarship assistance to worthy and deserving students.
- THE HARRY WECHSLER SCHOLARSHIP (1961) Established by Dr. Harry Wechsler of Leominster, Massachusetts, to provide scholarship assistance to a worthy student majoring in the field of Chemistry.
- LEO WEIDHORN SCHOLARSHIPS (1960) Established through a bequest from the Estate of Leo Weidhorn of Brookline, Massachusetts, to be used for scholarships for needy and worthy students without regard to nationality, race, creed or color.
- FRANK L. WEIL SCHOLARSHIP (1957) A full tuition scholarship set up by the Board of Trustees in grateful tribute to the late Frank L. Weil of New York City, honoring Mr. Weil's incumbency of six years as the first Chairman of the Fellows of the University. To be awarded to a gifted student who intends to prepare for a career in law or government.
- CHARLES M. WEINBERG SCHOLARSHIP (1960) Established by Mr. Charles M. Weinberg of Beverly Hills, California, to provide scholarship assistance to a worthy and deserving student.
- ANNE I. WEINER MEMORIAL SCHOLARSHIP (1960) Established by Mr. Sidney J. Weiner of Swampscott, Massachusetts, in memory of his mother, to provide scholarship assistance for a worthy and needy student.
- JOE WEINGARTEN SCHOLARSHIP (1958) Established by Mr. Morris L. Levinson of Scarsdale, New York, in honor of his father-in-law of Houston, Texas, to provide a tuition scholarship for four years for a worthy and deserving student.
- CHARLES WEINREB SCHOLARSHIP (1952) A tuition scholarship established by Mr. Charles Weinreb of Newton, Massachusetts, to aid a deserving student.
- THEODORE WEISMAN AND ANSON I. DREISEN SCHOLARSHIP (1959) Established by Messrs. Theodore Weisman and Anson I. Dresisen of Los Angeles, California, to provide tuition assistance for a worthy and deserving student.
- SEYMOUR WEISS SCHOLARSHIP (1953) A partial tuition scholarship given by Mr. Seymour Weiss of New Orleans, Louisiana, to assist a deserving student.

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- JACOB AND CILLI WEIZENBLATT MEMORIAL SCHOLARSHIP (1955)** A partial tuition scholarship established by Dr. S. Weizenblatt of Asheville, North Carolina, in memory of his parents, to provide assistance for a student irrespective of race, religion or sex, who needs and deserves help.
- ABRAHAM WHITMAN SCHOLARSHIP (1960)** Established by Mr. Abraham Whitman of Lynn, Massachusetts, to provide scholarship assistance for a worthy and needy student.
- MR. AND MRS. SIDNEY A. WIEN SCHOLARSHIP (1959)** A tuition scholarship for a gifted and needy student, established by Mr. and Mrs. Sidney A. Wien of Atlanta, Georgia, to honor a happy family occasion.
- LAURA NIKOLL WILLIAMS SCHOLARSHIP (1959)** Established by Mr. Morton S. Wolf of New York City, in memory of his beloved mother-in-law, as a tuition scholarship, with preference first to students from New Orleans and secondly from the State of Louisiana, who maintain high academic standing.
- AL WISE MEMORIAL SCHOLARSHIP (1953)** A partial tuition scholarship given by Mrs. P. Gewirtz of New York City, for aid to a deserving student regardless of race, creed or color.
- ERWIN S. WOLFSON SCHOLARSHIP (1957)** Established in honor of the distinguished philanthropist by Colonel J. R. Elyacher of New York City to provide a full tuition scholarship for a worthy and deserving student.
- ERWIN S. WOLFSON SCHOLARSHIPS (1959)** Established by Mr. Erwin S. Wolfson of New York City, to provide tuition and maintenance scholarships for gifted and needy students.
- PAUL WOLLNER SCHOLARSHIP (1961)** In memory of their beloved son, Paul, established by Mr. and Mrs. Saul Wollner of Great Neck, New York, to provide scholarship assistance for worthy and deserving students.
- BESSIE L. WOLPERT SCHOLARSHIP (1959)** Established by the late Bessie L. Wolpert of Minneapolis, Minnesota, to provide scholarship assistance to worthy students.
- WOMEN OF THE ROTARY CLUB OF BOSTON SCHOLARSHIP (1960)** A partial tuition scholarship established by the Women of the Rotary Club of Boston, to provide scholarship assistance to a worthy and deserving student.
- WOMEN'S DISTRICT GRAND LODGE NO. 6 B'NAI B'RITH SCHOLARSHIP (1949)** A partial tuition scholarship established by the Women's District Grand Lodge No. 6 B'nai B'rith of Chicago, Illinois, for aid to deserving students.
- WOMEN'S SCHOLARSHIP ASSOCIATION SCHOLARSHIP (1948)** Up to \$400 of the principal of this fund of \$9,000, contributed by the Women's Scholarship Association of Boston, Massachusetts, plus accumulated interest, may be used each year to aid needy women students in their freshman year who reside within a 25-mile radius of Boston.
- YANKEE STORES, INC., SCHOLARSHIP (1961)** Established by Mr. Joe Megdell and Mr. Wilbert Roberts of the Yankee Stores, Flint, Michigan, to provide scholarship assistance for a worthy student.

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ARTHUR YASPAN SCHOLARSHIP (1959) Established by Mr. Arthur Yaspan of New York City, to provide tuition assistance to a gifted and needy student.

ZABARSKY FOUNDATION SCHOLARSHIP (1958) Established through Mr. Milton J. Zabarsky of St. Johnsbury, Vermont, to provide a full tuition scholarship for four years to a gifted and worthy student.

MORRIS ZALE SCHOLARSHIP (1961) Established by Morris Zale of Dallas, Texas, to strengthen the program of interracial amity by providing scholarship assistance to worthy and deserving students. The scholarships are to be assigned by the faculty committee of the University and affirmed by the rabbi of Temple Emanu-El in Dallas.

TENA B. ZAMOISKI MEMORIAL SCHOLARSHIP (1951) Established by the Zamoiski Foundation, Inc., of Baltimore, Maryland, as a partial tuition scholarship in memory of Mr. Calman J. Zamoiski's mother.

WILLIAM ZECKENDORF SCHOLARSHIPS (1959) Established by Mr. William Zeckendorf of New York City to be assigned to worthy students for tuition and maintenance.

ALBERT ZIFFERBLATT SCHOLARSHIP (1959) Established by Mr. Albert Zifferblatt of Philadelphia, Pennsylvania, to provide scholarship assistance to needy and worthy students.

IRWIN ZUCKERMAN SCHOLARSHIP (1960) Established by Mr. Irwin Zuckerman of New York City, to provide scholarship assistance to needy and deserving students.

BENJAMIN AND JOHN ZURAW SCHOLARSHIP (1961) Established by Mr. and Mrs. Jerrold Loeb of Chicago, Illinois, to provide scholarship assistance to a worthy and deserving student.

APPENDIX VIII

Loan Funds

MR. AND MRS. NORMAN ASHER LOAN FUND (1953) Established by Mr. and Mrs. Norman Asher of Chicago, Illinois, for student loans, preference to be given to those majoring in science and mathematics.

KENNETH AUSLANDER MEMORIAL LOAN FUND (1959) Established by Mrs. Martin Auslander of New York City, in memory of her son, to be used for loans to worthy students.

BETTY BALANTZOW REVOLVING LOAN FUND (1953) Established with an initial grant of \$7,500 by Mr. Leonard Simons of Detroit, Michigan, and friends in memory of Mrs. Louis Balantzow of Cleveland, Ohio, for loans for needy students and younger faculty members.

SAMUEL AND JENNIE LOITMAN BARRON STUDENT AID FUND (1958) Established in honor of their 40th wedding anniversary by Mr. and Mrs. Samuel Barron, Jr., of Brookline, Massachusetts, and further augmented by tributes from family and friends.

JACOB M. AND FRED A. BLOOM FUND (1959) Established as a gift from the Estate of Jacob M. Bloom of Boston, Massachusetts, to provide free loan assistance to worthy students.

BRANDEIS SUMMER INSTITUTE LOAN FUND (1960) Established by the members of the 1960 Summer Institute for Adults, for the purpose of assisting young men and women regularly enrolled either in the college or any of the graduate or professional schools at Brandeis.

BRUMBERGER FOUNDATION LOAN FUND (1959) Established by this Foundation of Brooklyn, New York, to provide loan assistance.

SAMUEL J. AND ANNE MANSON CAPLAN LOAN FUND (1951) Established by Mrs. Samuel J. Caplan and the late Mr. Caplan of Detroit, Michigan, to aid worthy students.

CARLTON CITY CLUB OF NEW YORK LOAN FUND (1958) Established by the Carlton City Club, Inc. of New York City, through Mr. A. W. Link Scheffres, for loans to needy students.

ESSIE W. AND ARTHUR COHEN LOAN FUND (1955) Established by Mr. and Mrs. Robert Shapiro of Highland Park, Illinois, in honor of Mrs. Shapiro's parents, Mr. and Mrs. Arthur Cohen of Miami Beach, Florida. This loan fund may be drawn upon by students who need help in a critical period, without interest charges.

COHEN FOUNDATION FUND (1951) Established by the Joseph H. Cohen and Sons Foundation, through Mr. George L. Cohen of New York City, for loans to needy students.

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- BENJAMIN AND BERTHA DAITZMAN LOAN FUND (1959)** Established by family and friends of Mr. and Mrs. Benjamin Daitzman of Union City, New Jersey, in honor of their Golden Wedding Anniversary, and in recognition of their devoted and continuing service to refugees and all others needing a "friend," available to students in the School for Advanced Studies in Social Welfare.
- DIBNER EDUCATIONAL FOUNDATION, INC., STUDENT LOAN FUND (1958)** Established by the Dibner Educational Foundation, Inc. of Wilton, Connecticut, to provide student aid.
- DORA-JOSEPH CLUB STUDENT LOAN FUND (1956)** A contribution from the Dora-Joseph Club of Chicago, Illinois, to be used for loans to students.
- MOSE DUBERSTEIN LOAN FUND (1961)** Established by Mr. Duberstein of Dayton, Ohio, to provide loan assistance for worthy and deserving students.
- ABRAHAM DVLINSKY MEMORIAL LOAN FUND (1953)** Established by Mrs. Abraham Dvlinsky of Newtonville, Massachusetts, in memory of her husband, for loans to needy students and younger faculty members.
- JENNIE DVORTZOFF STUDENT LOAN FUND (1958)** Established in memorial tribute to Mrs. Jennie Dvortzoff of Forest Hills, New York, by her husband and children, Mr. William Dvortzoff, Mr. and Mrs. Martin Darrow and, Mr. and Mrs. Harry Dvortzoff.
- MOSES FACTOR LOAN FUND (1959)** Established in tribute to the late Moses Factor of Boston, Massachusetts, by his friends and associates of the Apparel Industries of New England. The income and part of the principal, which will be augmented from time to time, will provide loans to needy students.
- MORRIS AND BESSIE FALK LOAN FUND (1954)** Established by the Morris Falk Foundation in honor of Morris and Bessie Falk of Fitchburg, Massachusetts. This fund will make loans available to the same student for four years.
- BETTY FASMAN MEMORIAL STUDENT LOAN FUND (1959)** Established by Mr. Michael Fasman of Los Angeles, California, in memorial tribute to his wife, to aid worthy and needy students.
- HELENE AND MAURICE J. FELDMAN STUDENT LOAN FUND (1955)** Established by Mr. and Mrs. Maurice J. Feldman of Chicago, Illinois.
- ABRAM AND MINNIE FOX LOAN FUND (1960)** Established in honor of the 50th wedding anniversary of Mr. and Mrs. Abram Fox of Boston, Massachusetts, by their children, Mr. and Mrs. David Dangel, Mr. and Mrs. Alvan B. Fox, Mr. and Mrs. Franklin H. Fox, and Mr. and Mrs. Herbert L. Fox, to provide loan assistance for needy and deserving students. Further augmented by tributes from devoted friends.
- THE HATTIE B. FRANKLIN LOAN FUND (1961)** Established by Edward L. Franklin and Doraine Levy, executors of the Will of the late Hattie B. Franklin of New York City, to provide for loans to worthy students.
- BESSIE FRIEDMAN MEMORIAL LOAN FUND (1961)** Established by Mr. Milton M. Friedman of Chicago, Illinois, for loans to worthy and needy students.

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- GENERAL LOAN FUND (1950) Established at the University by various contributors for loans to deserving students.
- ERNEST AND IDA GLOTZER STUDENT LOAN FUND (1960) Established by Messrs. Jack Bresnick and A. Bailet and their families in honor and appreciation of their parents.
- THE IRVING H. GOELMAN LOAN FUND (1961) Established by Mrs. Irving H. Goelman and family of Barbourville, Kentucky, as a memorial tribute to their beloved husband and brother, to provide loan assistance for worthy and deserving students.
- SARAH GOLDBERG FUND (1955) Established through the Estate of Sarah Goldberg of New Bedford, Massachusetts, to aid deserving students.
- GOLDEN RULE LOAN FUND (1956) Established by Messrs. Ralph Carson, Seymour Fabrick, Norman Hanak, Larry Levy, Mr. and Mrs. Henry Mayers, Messrs. Seymour Owens, Harry Painter, Jack Roberts and Phil Rosenberg of Los Angeles, California, to be utilized as a rotating living expense fund, with preference given to graduate students and younger faculty members.
- HERMAN AND MATHILDA W. GOODMAN MEMORIAL LOAN FUND (1958) Established by Mr. S. Wynn Goodman of Shaker Heights, Ohio, as a memorial tribute to his parents, for loans to worthy and needy students.
- COL. BERNARD L. GORFINKLE GRADUATE STUDENT LOAN FUND (1955) Established by Col. Bernard L. Gorfinkle of Boston, Massachusetts, to provide assistance to deserving graduate students.
- JOSEPH GREENBLATT LOAN FUND (1959) Established by Mr. Joseph Greenblatt of Philadelphia, Pennsylvania, to provide loan assistance for needy students.
- HI CHARLIE FUND (1951) A portion of the proceeds of the annual student revue "Hi Charlie" has been set aside to aid deserving students who might otherwise be unable to complete their education.
- HOLYOKE HEBREW LADIES FREE LOAN SOCIETY (1954) A contribution from this Society of Holyoke, Massachusetts, for loans to students.
- FANNIE E. AND JACOB HORWITZ LOAN FUND (1954) Established by their daughter, Miriam, and an anonymous friend of the University for assistance to needy students, in remembrance of her own son's financial difficulties while attending Brandeis University.
- EMANUEL KLEIN LOAN FUND (1958) Established by Mrs. Emanuel Klein of Memphis, Tennessee, in memorial tribute to her husband, to aid worthy and needy students.
- ALFRED J. KOBACKER STUDENT LOAN FUND (1957) Established by the Alfred J. Kobacker Memorial Foundation through Messrs. James and Arthur Kobacker of Steubenville, Ohio.
- ANNA AND SAMUEL KOHN STUDENT LOAN FUND (1960) Established by their three children, Mrs. David R. Pokross and Messrs. Lester J. and Warren B. Kohn of Belmont, Massachusetts, on the occasion of their parents' 50th wedding anniversary, for loans to deserving students regardless of geographical location, sex, race or creed. Further augmented by tributes from family and friends.

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- JACOB KORSER MEMORIAL LOAN FUND (1956)** Established in memory of Jacob Korsen by friends and relatives in Beverly Hills and Los Angeles, California, to be used exclusively for worthy students in the field of music.
- DORA KRAUS WELFARE LEAGUE FUND (1950)** Established by the Dora Kraus Welfare League of New York City to aid worthy students.
- LOUIS K. LAMBERT MEMORIAL LOAN FUND (1951)** Established by the family and friends of the late Louis K. Lambert of Grosse Pointe, Michigan, to be used for loans to all-round students rather than those whose interests are purely academic.
- VICTOR K. LA MER LOAN FUND (1958)** A contribution from Mr. Victor K. La Mer of Leonia, New Jersey, for student aid.
- MR. AND MRS. T. E. LEAVEY STUDENT LOAN FUND (1960)** Established by Mr. and Mrs. T. E. Leavey of Los Angeles, California, to provide loan assistance to worthy students.
- MR. AND MRS. PAUL LERMAN STUDENT LOAN FUND (1955)** Established by Mr. Albert Lerman of Brookline, Massachusetts, and the late George Lerman of Newton, Massachusetts, in honor of their parents' 36th wedding anniversary.
- REBECCA AND EDWARD LEVINE LOAN FUND (1956)** Established with an initial grant by Mr. and Mrs. Saul Fechter of Brookline, Massachusetts, in honor of the 50th wedding anniversary of Mr. and Mrs. Edward Levine of Newton, Massachusetts, for loans to students.
- DR. SAMUEL A. AND ROSALIND W. LEVINE LOAN FUND (1952)** A fund of \$2,500.00 established by Dr. and Mrs. Samuel A. Levine of Newton Centre, Massachusetts, to provide loans to deserving students.
- LEE J. AND GERTRUDE LOVENTHAL LOAN FUND (1951)** Preference in awarding assistance from this fund will be given to students from Tennessee, particularly from the Nashville and Memphis areas, in accordance with the wish of the donors, Mr. and Mrs. Abe Waldauer of Memphis.
- PHILIP AND SALLY LOWN LOAN FUND (1955)** Established by Mr. and Mrs. Philip Lown of Auburn, Maine, for loans to worthy students, members of the faculty or for administrative personnel.
- SAMUEL M. MAGID STUDENT LOAN FUND (1960)** Established by Mr. and Mrs. Herbert J. Selib of Chestnut Hill, Massachusetts, in honor of Mr. Samuel Magid, to assist needy students.
- MARTIN ELLIOT MANGEL FOUNDATION FUND (1950)** Established by Mr. and Mrs. Emanuel Mangel of New York City, in memory of their son, Martin. Preference is to be given to all-round students rather than to those whose interests are purely academic.
- ALCON S. MARGULES AND LAWRENCE SANDBERG LOAN FUND (1960)** Established by Messrs. Alcon S. Margules and Lawrence Sandberg of New York City for loans to worthy and needy students.

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- JOHN H. MELEN STUDENT LOAN FUND (1959) Established by Mr. John H. Melen of New York City, for loans to needy students.
- MEN'S COLLEGE CLUB STUDENT LOAN FUND (1959) Established as a memorial tribute to Ben Benson by the Men's College Club of Boston, Massachusetts, for loans to needy students.
- JOSEPH L. AND PEARL MILHENDER STUDENT LOAN FUND (1959) Established by Mr. and Mrs. Joseph L. Milhender of Newton Highlands, Massachusetts, for loans to needy students.
- BENJAMIN AND MIRIAM H. MORSE STUDENT LOAN FUND (1959) Established by family and friends of Mr. and Mrs. Benjamin Morse of Brookline, Massachusetts, in honor of their Golden Wedding Anniversary, for loans to needy students.
- HENRY NIAS FACULTY LOAN FUND (1958) A generous grant contributed by the Henry Nias Foundation, Inc., of New York City to provide loan assistance for members of the faculty.
- SAMUEL PATROWICH LOAN FUND (1951) Established by Mr. Samuel B. Solomon of Detroit, Michigan, in memory of Samuel Patrowich, to be used for loans to worthy students.
- BENNETT A. PEMSTEIN STUDENT LOAN FUND (1955) Established through the Estate of Bennett A. Pemstein by the Pemstein family of Worcester, Massachusetts, for loans to deserving students.
- BETTY L. PHILLIPS MEMORIAL FUND (1959) Established by a bequest from the Estate of Emanuel W. Phillips of Chicago, Illinois, in memorial tribute to his mother, for loans to needy students.
- POLIMER FAMILY STUDENT LOAN FUND (1959) Established by the Polimer Family Group of Boston, Massachusetts, for loans, without interest, to needy students.
- JOSEPH POLLAK LOAN FUND (1949) Contributed by Mr. Joseph Pollak of Dorchester, Massachusetts, for loans to worthy students.
- MANNING J. POST LOAN FUND (1959) Established by Mr. Manning J. Post of Encino, California for loans to needy students.
- JOSEPH AND LOTTIE RABINOVITZ STUDENT AID FUND (1949) Founded by the Stop and Shop employees and other friends of Mr. Joseph Rabinovitz and the late Mrs. Rabinovitz of Boston, Massachusetts, in honor of their Golden Wedding Anniversary. A fund of \$5,000 is available for loans to deserving students.
- JOSEPH RENFIELD LOAN FUND (1959) Established as a tribute to the late Joseph Renfield of New York City by friends and associates to provide loan assistance to needy students.
- MR. AND MRS. SYDNEY RESNICK LOAN FUND (1958) A contribution from Mr. and Mrs. Sydney Resnick of San Jose, California, for student aid.

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- NATHAN AND JENNIE ROTTENBERG STUDENT LOAN FUND (1958)** Established by Mr. and Mrs. Abraham Schultz of Chestnut Hill, Massachusetts, in honor of the 70th birthday of Mrs. Schultz's father.
- MR. AND MRS. WILLIAM J. RUDOLPH STUDENT LOAN FUND (1961)** Established by the grandchildren of Mr. and Mrs. William J. Rudolph of Swampscott, Massachusetts, in honor of their 40th Wedding Anniversary, to provide loans for worthy and needy students.
- ST. LOUIS LOAN FUND (1953)** Established by an anonymous friend of the University for assistance to needy students, in remembrance of his own financial difficulties while attending the University of Illinois.
- JACK SATIN LOAN FUND (1953)** A contribution from Mr. Jack Satin of Tulsa, Oklahoma, for loans to students.
- JOSEPHINE N. SCHEY FREE LOAN FUND (1953)** Established by the late Berthold M. Schey of New Rochelle, New York, in memory of his sister.
- GEORGE J. SCHORR OF PHILADELPHIA LOAN FUND (1959)** Established as a memorial tribute to George J. Schorr of Philadelphia, Pennsylvania to aid faculty members who are in need of emergency loans.
- JACK SEEDMAN STUDENT LOAN FUND (1958)** Given by George and Ethel Seedman of Beverly Hills, California, in memory of Mr. Seedman's father, with preference to worthy students in the field of political science.
- EVELYN SHEA LOAN FUND (1956)** Established in honor of Miss Evelyn Shea of New York City by her buyers at the Lerner Shops, and further augmented by friends and associates. This fund will aid worthy students and may be drawn upon by those who need help in a critical period, without interest. Further augmented at a University affair by devoted friends.
- DR. PHILIP SHER LOAN FUND (1958)** Established by Dr. Philip Sher of Omaha, Nebraska, for loans to needy students.
- ISER AND HELENE SOLOMON SLOANE FOUNDATION FOR STUDENT LOANS (1961)** An endowment fund established under the Will of Iser Solomon Sloane, late of Los Angeles, California, to provide meritorious students with loans for studies in this country, and at the Hebrew Universities in Israel.
- BEN AND ROSA STEIN MEMORIAL LOAN FUND (1952)** Established with an initial grant by Mr. Phil Stein of Terre Haute, Indiana, in memory of his parents, and augmented by contributions from the family.
- SARAH STRIER MEMORIAL LOAN FUND (1954)** Established under the terms of the Will of Sarah Strier of New York, for loans to faculty members.
- JEAN STRUHL LOAN FUND (1958)** Established by Mr. Louis Struhl of Jersey City, New Jersey, in honor of his wife, to offer financial assistance to needy students.
- EDWARD A. SUISMAN FACULTY LOAN FUND (1952)** Established by Mr. Edward A. Suisman of Hartford, Connecticut, to aid faculty members who are in need of emergency loans.

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DR. REUBEN THALBERG LOAN FUND (1960) Established by Dr. Reuben Thalberg of Southington, Connecticut, for loans to worthy and needy students.

ISRAEL AND BELLA UNTERBERG LOAN FUND (1957) Established in memory of Mr. and Mrs. Israel Unterberg of New York City by the Unterberg Family Group, to be used for loans to needy students.

WIDOWS AND ORPHANS FUND (1952) Established by the Widows and Orphans Fund of the John Hancock Lodge No. 70 Memorial Fund of New York City to aid worthy students.

HARRY WILDERMAN STUDENT LOAN FUND (1959) Established through a bequest from the Estate of Harry Wilderman of Tampa, Florida, to provide loan assistance for needy students.

WOMEN'S SCHOLARSHIP ASSOCIATION REVOLVING LOAN FUND (1961) Established by the Women's Scholarship Association of Boston, Massachusetts, which will make the awards to worthy female students. The University will administer the funds in accordance with the repayment schedule set up by the Donor. Repayments will revert to the Women's Scholarship Association Revolving Loan Fund.

WILLIAM AND LOUISE ZACHS LOAN FUND (1960) Established through the Will of William Zachs of West Hartford, Connecticut, for loans to worthy students.

APPENDIX IX

Service Endowment and Service Funds

- MAX AND EVA APPLE SERVICE SCHOLARSHIP AWARD (1954)** Established with an initial grant of \$5,000 by Mr. and Mrs. Max Apple of Cleveland, Ohio, to provide student employment opportunities.
- HARRY E. BASS SERVICE FUND (1953)** Established by Mr. Harry E. Bass of Houlton, Maine, to finance student employment.
- MAX L. BEAR SERVICE FUND (1956)** Established by Mr. and Mrs. Harold E. Marcus of Atlanta, Georgia, in memory of Mrs. Marcus' father, Max L. Bear, of Pensacola, Florida, to provide employment opportunities for worthy students.
- BERNARD BEEMAN SERVICE FUND (1958)** Established by United Hydraulics, Inc., through Mr. Max Isaacson, of Dayton, Ohio, in memory of Bernard Beeman, to provide service opportunities for needy science students.
- GEORGE S. CARP AND ROSE CARP SERVICE ENDOWMENT FUND (1951)** Established under the terms of the Will of George S. Carp of Boston, Massachusetts, the income of this \$5,000 fund will provide part-time employment for needy and deserving students.
- EDITH M. AND MAX M. CHECK SERVICE ENDOWMENT FUND (1959)** Created as a memorial to Edith M. Check by her late husband, and by her son, Dean, of Brookline, Massachusetts, and further augmented by a bequest from the Estate of Max M. Check.
- MAX GERBER MEMORIAL SERVICE ENDOWMENT FUND (1959)** Established by the family of the late Max Gerber of Winnetka, Illinois, the income will provide employment opportunities for needy students.
- SELMA AND LOUIS GORDON STUDENT AID ENDOWMENT FUND (1956)** Established by Mr. and Mrs. Louis M. Gordon of Boston, Massachusetts, the income to be used for assistance primarily to visually handicapped students; and secondly to other needy students.
- GROSSMAN FAMILY TRUST SERVICE ENDOWMENT FUND (1955)** Created by Mr. Reuben A. Grossman and the Grossman Family Trust of Quincy, Massachusetts, to provide employment opportunities for needy and deserving students.
- REUBEN A. AND LIZZIE GROSSMAN SERVICE SCHOLARSHIP (1956)** Established by the employees of L. Grossman's, Inc., of Quincy, Massachusetts, in honor of Mr. Reuben A. Grossman and the late Mrs. Grossman on their Golden Wedding Anniversary, to provide employment opportunities for worthy students.
- MORRIS HOMONOFF SERVICE ENDOWMENT FUND (1954)** Established by the wife and children of Mr. Morris Homonoff of Brighton, Massachusetts, in honor of his 70th birthday, the income to aid needy and deserving students.
- SAUL HOROWITZ, JR. SERVICE FUND (1959)** Established by Mr. Saul Horowitz, Jr., of New York City, to offer student employment opportunities.
- ILLINI-SACHAR SERVICE FUND (1961)** Established by former students of Dr. Sachar at the University of Illinois, to provide employment opportunities for deserving students.

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- ABRAHAM J. KARPAS SERVICE FUND (1960)** Established under the terms of the Will of Abraham S. Karpas of Brookline, Massachusetts, to provide part-time employment for needy and deserving students in the University Library.
- RICHARD KORET SERVICE FUND (1961)** Established as a tribute to Mr. Richard Koret of New York City by his friends, in honor of his birthday, to provide employment opportunities to worthy students.
- FRED LOBL SERVICE FUND (1957)** Established in honor of Mr. Fred Lobl of Middleboro, Massachusetts, to provide student employment assistance.
- BENJAMIN MILLER SERVICE ENDOWMENT FUND (1955)** Created as a memorial to Benjamin Miller through the Trustees of his Estate, the income will provide help for worthy students to complete their college program.
- DR. DAVID MONASH SERVICE SCHOLARSHIP (1956)** Established as a memorial to her husband by Mrs. David Monash of Chicago, Illinois, to provide assistance for gifted and needy students through employment opportunities on campus.
- LOUIS H. NEVIN SERVICE FUND (1959)** Established by Mr. and Mrs. Frank Rubenstein of Pittsburgh, Pennsylvania, in memory of Mrs. Rubenstein's father, to provide employment opportunities for worthy students.
- ABRAHAM PERSKY FUND (1951)** Under the terms of this benefaction from Mr. Abraham Persky of Worcester, Massachusetts, an annual grant is to be made available in support of the student employment program.
- LUCY AND CLARENCE RICH SERVICE FUND (1961)** Established by Gerald L. Rich and M. Harry Golburgh, executors of the will of Lucy Rich, to provide assistance for needy and worthy students through employment opportunities on campus.
- JACK A. SIMON SERVICE FUND (1961)** Set up by a former student of President Abram L. Sachar. To be assigned for employment opportunities on the campus.
- JOE SNYDER SERVICE FUND (1960)** Established by Mr. Benjamin Victor of Springfield, Illinois, in memory of Joe Snyder, to provide employment opportunities for worthy students.
- MORRIS AND ALAN I. STERN SERVICE SCHOLARSHIP ENDOWMENT FUND (1957)** Established as a memorial tribute to their son, Alan, by Mrs. Morris Stern and the late Morris Stern of Milwaukee, Wisconsin, and other members of the family. Further augmented by tributes in memory of Morris Stern.
- LILLIAN HIMOFF TIPLITZ SERVICE FUND (1961)** An annual contribution, in memory of Lillian Himoff Tiplitz, to augment the resources of the School for Advanced Studies in Social Welfare for assisting graduate students in the field of Mental Health.
- FRANK L. WEIL SERVICE FUND (1957)** Created through memorial tributes from the friends of the late Frank L. Weil of New York City, to be used in the spirit of his helpful career by offering employment opportunities to needy students.
- IDA AND JENNIE WEXELMAN MEMORIAL SERVICE ENDOWMENT FUND (1957)** Established by Miss Yette Wexelman of Chicago, Illinois, in memory of her mother and sister, the income will provide employment opportunities for needy students.

APPENDIX X

Prizes

HELEN R., MAX, BERTHA AND NORMAN M. BEHR SCHOLARSHIP PRIZE (1950) Established by Mr. Julian J. Behr of Cincinnati, Ohio, in memory of his beloved wife, parents, and brother. An award of \$50.00 will be made each year by a Faculty Committee to a student for some outstanding achievement to be determined by the Committee.

LOUIS D. BRANDEIS HONORARY SCHOLARSHIPS (1950) Established as a prize designation without stipend. To be awarded each year to twelve students who have Dean's List standing and who, in the opinion of the Committee, are deserving of recognition for scholarship attainment.

JOSEPH AND IDA BUTMAN AWARD (1953) The income from this fund established by the family and friends of Mr. and Mrs. Joseph Butman of Swampscott, Massachusetts, in honor of their Golden Wedding Anniversary, is to be used as a prize to a gifted student who displays scholarship and general leadership.

PATRICK THOMAS CAMPBELL AWARD IN HISTORY (1951) A tribute to an outstanding educator, this \$50 award is to be made to a student in recognition of distinction in the field of history. Established by Messrs. Sidney, Norman and Irving Rabb of Boston, Massachusetts.

CLASS OF 1955 ENDOWMENT FUND PRIZE (1955) Approximately six awards of \$10 each, established from the Class of 1955 Fund, to be given annually commencing with the academic year 1960-61. These prizes, in the form of books, will be awarded to students who have demonstrated extraordinary academic or creative achievement in any field of endeavor within the four schools of the University.

PHYLLIS AND LEE COFFEY AWARD IN MUSIC (1955) An award of \$100 established by Mr. and Mrs. Lee Coffey of New York City, to be presented to a student outstanding in the field of music.

SIDNEY S. COHEN PRIZE AWARD IN ECONOMICS (1951) The income from this fund established by Mr. Sidney S. Cohen of St. Louis, Missouri, to be awarded to one or two students for outstanding work in the field of economics.

FARBAND LABOR ZIONIST ORDER AWARD (1959) Established by this organization through Farband District 10 (Massachusetts and Rhode Island) in memory of Professor Simon Rawidowicz, to be presented to a student outstanding in Hebrew studies.

FARBAND LABOR ZIONIST ORDER PRIZE IN YIDDISH (1960) For an outstanding student of Yiddish language and literature.

SAUL AND SARAH FECHTOR PRIZE (1953) A prize of \$100 to be awarded to a student who excels in the field of political science, given by Mr. and Mrs. Saul Fechter of Boston, Massachusetts.

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YOLANDA AND LOUIS FLEISCHMANN ACHIEVEMENT AWARD (1955) Established by the Ladies' Auxiliary of the Louis Fleischmann Benevolent Society, Inc., of New York City, as an award of \$25, to be presented to a student in the graduating class on the basis of outstanding leadership in Jewish activities.

EDGAR V. M. GILBERT AWARDS (1957) Established by Mr. Edgar V. M. Gilbert of New York City, in memory of Natalie Gilbert, to provide three awards, one for sculpture, one for excellence in draftsmanship, and one for painting. The recipients will be selected during the annual student art exhibition, with preference given to students who have not won previous awards.

ELI D. AND MOLLIE L. GOODSTEIN ENDOWMENT FUND PRIZE (1954) Established by Mr. Eli D. Goodstein of Fitchburg, Massachusetts, the income to be used as a prize to a student outstanding in the study of Spanish.

ELI D. AND MOLLIE L. GOODSTEIN ENDOWMENT FUND PRIZE (1955) Established by Mr. Eli D. Goodstein of Fitchburg, Massachusetts, the income to be awarded as a prize to a student outstanding in the study of Hebrew.

SAMUEL L. GUNTHER PRIZE IN ECONOMICS (1960) Established by Mr. R. J. Mack, and his associates, of Cincinnati, Ohio in memory of Samuel L. Gunther, to be awarded to an outstanding student in Economics or some kindred subject.

HENDEL FAMILY ASSOCIATION PRIZE (1954) Established by the Hendel Family of New London, Connecticut, to be awarded to a freshman who excels academically in all areas of study.

HI CHARLIE AWARDS (1951) Established by this Association to be awarded to a graduating student, or students, who have made an outstanding contribution to the Theatre Arts Department and the activities of this organization.

HERMAN E. LECKS PRIZE IN CHEMISTRY (1960) Established by Mr. Herman E. Lecks of Margate City, New Jersey, to be awarded to an outstanding student in the field of chemistry.

HARRY H. LEVENSON AWARD (1961) Established in his memory by his wife and daughters of West Roxbury, Massachusetts. This award will be given in the form of appropriate books to a student majoring in anthropology or the social sciences.

GEORGE LUXNER FELLOWSHIP PRIZE (1958) A special fellowship to provide study abroad for one year to a deserving student. The qualification need not be exclusively one of scholarship, but rather such qualities as make the candidate exemplary in terms of good University citizenship.

RICHARD J. MACK PRIZE IN FOREIGN LANGUAGES AND LITERATURE (1959) Established by Mr. Richard J. Mack of Cincinnati, Ohio, in honor of the 45th wedding anniversary of his devoted friends, Mr. and Mrs. Julian J. Behr. To be awarded to an outstanding student in the field of foreign languages and literature.

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BRUCE R. MAYPER MEMORIAL AWARD (1950) The income from this fund established by Mr. and Mrs. Joseph Mayper of New York City, in memory of their son, is to be used for an award of not less than \$100 to a student who is deemed worthy of recognition for general activities promoting interracial amity or for individual work in the field of interracial relations.

FLORENCE AND CHARLES H. MILENDER PRIZE IN MUSIC (1953) Established by Mr. and Mrs. Charles H. Milender of Boston, Massachusetts, the income to be used for a prize to a student excelling in music.

DR. JOSEPH GARRISON PARKER PRIZE (1954) An endowment fund established by Dr. and Mrs. Philip Parker of New York City, in memory of their beloved son, the income to be used as a prize for a student outstanding in the field of science or creative arts.

LILA R. PEARLMAN MEMORIAL AWARDS (1959) Established in memory of Miss Lila R. Pearlman of Syracuse, New York, a member of the Class of 1959, by her family. To be awarded to two outstanding students, one each in the field of history and psychology.

LOUIS P. RABINOVITZ ENDOWMENT ART AND SCHOLARSHIP FUND (1957) An endowment fund established by the Trustees under the terms of the Louis P. Rabinovitz Trust Fund of Boston, Massachusetts, to provide an award of \$100 to the student who shall have been judged to have exhibited the most promising work in painting, sculpture or the graphic arts.

ISRAEL RAVREBY AWARD (1951) The Student Council of Brandeis University has set aside \$50 for an award to a student in recognition of outstanding performance in the field of mathematics or chemistry, in memory of Israel Ravreby, a member of the Class of 1952.

RUTH G. ROSE AWARD OF THE NATIONAL WOMEN'S COMMITTEE (1955) Established by the National Women's Committee of Brandeis University to honor outgoing National Presidents, to be given to a student who has demonstrated leadership in campus activities and who, through academic achievement, exemplifies the well-rounded student.

TIBIE ROSENFELD AWARD (1955) Established by Mr. Coleman Rosenfield of West Hollywood, Florida, in honor of his mother, an award of \$50 will be made to a student outstanding in the field of dramatics.

MITCHELL M. ROSSER MEMORIAL FUND PRIZE (1955) Established by the Trustees of the Mitchell M. Rosser Memorial Fund of Chestnut Hill, Massachusetts, to be awarded to a student who has done the most for the promotion of the Newman Club.

ROSE SCHLOW AWARD (1950) The income from this fund is to be awarded to a student who, by thoughtfulness and kindness to others rather than by academic brilliance, has contributed to the well-being of his fellow students. Established in her memory by her children, Mr. Charles Schlow and Mrs. A. Leopold of State College, Pennsylvania.

ROSE SERKESS MEMORIAL AWARD (1956) Established in her memory by her husband, Joseph, and family of Boston, Massachusetts. This award is to be given, in the form of appropriate books, to the female student majoring in Philosophy or Philosophy of Religion, who best exemplifies humanitarian idealism.

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- SHALOM AWARD (1960)** Established by Mr. Ben Paul Brasley of Pittsburgh, Pennsylvania in gratitude on his 75th birthday, to make available an annual award to encourage original research in the undergraduate student body.
- MELVIN M. SNIDER PRIZE IN CHEMISTRY (1954)** Established in his memory by his wife and children, the income from this fund will be awarded as a prize to a student outstanding in the field of chemistry.
- BEN AND ROSA STEIN ANNUAL MEMORIAL PRIZE IN CREATIVE ARTS (1952)** A \$50 prize to be awarded to a deserving graduating student in the field of creative arts, contributed by Mr. Phil Stein of Terre Haute, Indiana, in memory of his parents.
- IDA STEIN MEMORIAL AWARD (1954)** Originally created in memory of his mother by our late Professor Harry Stein. This award is made by the remaining members of the Stein family to honor the memory of their mother, and brothers Harry and Joseph H. Stein. To be presented to the student who combines scholastic ability with good sportsmanship and athletic achievement, as demonstrated in either intramural or varsity athletics.
- CELIA AND OSCAR STERMAN PRIZE (1961)** Established by Mr. and Mrs. Oscar Sterman of Brookline, Massachusetts. This prize of \$25.00 is to be awarded annually to the student writing the best essay on any subject pertaining to Yiddish culture.
- TEMPLE SHALOM PRIZE (1950)** A \$50 prize to be awarded to a student who is a candidate for Hebrew Union College, for excellence in Hebrew. Contributed by the pupils of the Temple Shalom Religious School of Newton, Massachusetts.
- THEATRE ARTS DEPARTMENT SERVICE AWARD (1960)** Established by the Theatre Arts staff in recognition of significant contribution to the growth and development of production activities of the Department.
- JACOB AND BELLA THURMAN AWARDS (1950)** The income from this fund to be awarded to a student or students who have demonstrated the highest type of social citizenship; who have displayed kindness, sympathetic understanding, and high moral character in the judgment of the faculty and of their fellow students. Established in memory of Jacob and Bella Thurman by their children.
- EUGENE M. WARREN POETRY PRIZE (1952)** Established by Mrs. Eugene M. Warren of Boston, Massachusetts, in memory of her husband, as an award for excellence in poetry.
- SAMUEL WECHSLER AWARD IN MUSIC (1960)** Established by his sons, Robert R. and John R. Wechsler of New York on the occasion of their father's 75th birthday. An annual award intended to further musical education, to be presented to a student who is judged as creating the best original musical composition.
- HENRY AND IDA WILCHINSKI POETRY PRIZE (1959)** Established by Miss Martha L. Wilchinski of New York City, in memory of her parents, for an original lyric poem.

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YIDDISH CULTURE CLUB PRIZE (1954) Established by the Yiddish Culture Club of Boston, Massachusetts, to be awarded to the student writing the best essay, between 2500 and 3000 words in length, on any subject pertaining to Yiddish literature.

HELEN ARONSON ZOFNASS ENDOWMENT FUND (1960) An endowment fund established by Mr. and Mrs. Edmund Aronson, in memory of their daughter, Helen Aronson Zofnass, for a prize in history to be awarded to a gifted student each year.

APPENDIX XI

Research Funds and Grants

- MORTON AARONSON MEMORIAL FUND (1959) Set up by the family and friends of the late Morton Aaronson of New York, to be drawn upon for research allocations in the field of social science.
- AGOOS FAMILY CHARITY FUND RESEARCH GRANT (1956) Established by the Agoos Family Charity Fund of Boston, Massachusetts, for research in the Life Sciences.
- AIR FORCES RESEARCH AND DEVELOPMENT COMMAND (1961) Awarded by the Department of Defense, to Dr. Stanley Deser, Associate Professor of Physics, for research in "Theoretical Study of Elementary Physics."
- AMERICAN CANCER SOCIETY, INC. (1960) Awarded to Dr. Lawrence Levine, Associate Professor of Biochemistry for research in "Proteins of Bacteriophage; their Roles in Virus Maturation and Relationship of their Structure to Molecular Differentiation."
- AMERICAN CANCER SOCIETY GRANT (1960) Awarded by the American Cancer Society to Dr. Nathan O. Kaplan, Professor of Biochemistry, and Dr. William P. Jencks, Associate Professor of Biochemistry, as an institutional research grant.
- AMERICAN CANCER SOCIETY GRANT (1958) Awarded by the American Cancer Society to Dr. Nathan O. Kaplan, Professor of Biochemistry, for research on "Significance of the Molecular Heterogeneity of Enzymes in Normal and Neoplastic Tissues."
- AMERICAN CANCER SOCIETY SCHOLAR GRANT (1957) Established by the American Cancer Society and awarded to Dr. Mary Ellen Jones, Associate Professor of Biochemistry, for her support.
- AMERICAN HEART ASSOCIATION GRANT (1961) Established by the American Heart Association and awarded to Dr. Richard S. Morgan, Assistant Professor of Biochemistry, for his support.
- MAY BALKIN RESEARCH FUND (1957) Established through a bequest under the terms of the Will of May Balkin of Kansas City, Kansas, to aid in the research program of the University, with special emphasis on cancer research.
- SAM BEBER RESEARCH FUND (1955) Established by Mr. Sam Beber of Park Forest, Illinois, for the purpose of strengthening the research program of the University.
- SAMUEL AND ROSE BERCH RESEARCH FUND (1959) Established by Mrs. Samuel Berch of Los Angeles, California, for research in the areas of science.
- JULIUS BLUM RESEARCH FUND IN POLITICS (1958) Established by Messrs. Walter H. Blum and William Thurnauer of Carlstadt, New Jersey, in memory of their uncle, to supplement the theory of politics with its practical application on the precinct and community level.

APPENDIX

ETHEL BRESLOFF FUND (1954) Established through a bequest from the Estate of Ethel Bresloff of Boston, Massachusetts, administered by Col. Bernard L. Gorfinkle, this fund is to be used primarily for research in developing a history of the early Jewish settlers in the North End of Boston.

LIBBY AND JOSEPH BUCHHALTER SCIENCE RESEARCH ENDOWMENT FUND (1959) Established in honor of their 50th wedding anniversary by their children, Mr. and Mrs. Harold Buchhalter, Mr. and Mrs. Barton Buchhalter, Dr. and Mrs. Julius Friedman, Mr. and Mrs. Herbert B. Lewis.

COMMITTEE OF PERMANENT CHARITY RESEARCH FUND (1960) Established by this committee as a grant to carry on research at Brandeis respecting the charitable trusts of the Commonwealth of Massachusetts.

THE COMMONWEALTH FUND GRANT (1961) Awarded to Dr. Louis Levin, Dean of Science, for a "Study and Development of a Program for Training in the Basic Medical Sciences."

THE FORD FOUNDATION GRANT (1960) Awarded to Dean Charles I. Schottland for research on "Effective Programs for Older People to be Developed within the Framework of Existing Local Voluntary and Public Agencies."

GROSBERG FAMILY CHARITY FUND RESEARCH GRANT (1956) Established by the Grosberg Family Charity Fund, Inc., of Boston, Massachusetts, for research in the Life Sciences.

MAX ISAACSON RESEARCH FUND (1956) Established by Mr. Max Isaacson of Dayton, Ohio, for research in the Life Sciences.

ISAAC AND ESTHER KAPLAN RESEARCH FUND (1953) Established by friends in honor of the 50th wedding anniversary of Isaac and Esther Kaplan of Boston, Massachusetts.

PHILIP AND LENA LANDSMAN RESEARCH IN JUDIAC STUDIES (1960) Established by Mr. George Landsman of Rockville Centre, New York, in memory of his parents, to provide research in the field of Judaic studies.

SIMON G. LATIES RESEARCH FUND (1951) Established by Mr. Simon G. Laties of Peabody, Massachusetts, to help finance the research program at the University.

JANE LIEBERMAN RESEARCH FUND (1956) Established by friends of Mrs. Bernard Lieberman of Huntington Woods, Michigan, to subsidize research at the University.

MARY MANN RESEARCH FUND (1955) Established by the Mary Mann Philanthropic League, Inc., for research in the Life Sciences.

ANNA MATHES RESEARCH GRANT (1958) Established in memory of his beloved mother by Mr. Leonard Mathes of Beverly Hills, California, to help support the cancer research program.

THE ELIZABETH MCCORMICK MEMORIAL FUND OF CHICAGO GRANT (1961) Awarded to Dean Charles I. Schottland, The Florence Heller Graduate School, for a "Study of Moral Judgments of Families with Pre-Adolescent Delinquent Children."

APPENDIX

- THE MEDICAL FOUNDATION INC., RESEARCH GRANT (1961) Awarded to Dean Charles I. Schottland, Florence Heller Graduate School for Advanced Studies in Social Welfare, for research in "Factors Affecting Selection of a Clinic Population."
- THE MEDICAL FOUNDATION INC., RESEARCH GRANT (1960) Awarded to Dr. John M. Lowenstein, Assistant Professor of Biochemistry, for research in the field of Biochemistry.
- HAL A. MILLER RESEARCH FUND (1954) An annual contribution from Mrs. Menasha E. Katz of Baltimore, Maryland, to encourage research at the University.
- MELVIN S. MOSS RESEARCH FUND (1959) Established by Mr. Melvin S. Moss of Las Vegas, Nevada, for the cancer research program.
- THE NATIONAL FOUNDATION GRANT (1961) Awarded to Dean Charles I. Schottland, The Florence Heller Graduate School, for research in "Tasks and Roles of the Health-Serving Professions."
- THE NATIONAL FOUNDATION GRANT (1960) Awarded to Dr. Ludwig Brand, a Post-Doctoral Research Fellow of Biochemistry, "Supply Grant."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the Cancer Chemotherapy National Service Center to Dr. Orrie M. Friedman, Professor of Chemistry, for research in the "Study of the Mode of Action of Phosphorylated Alkylating Agents."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by Division of Research Grants to Dr. Orrie M. Friedman, Professor of Chemistry, for research on "Chemotherapy of Cancer."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded to Dr. Nathan O. Kaplan, Professor of Biochemistry, for a "Graduate Training Program in Biochemistry."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the National Cancer Advisory Council to Dr. Nathan O. Kaplan, Professor of Biochemistry, for research in "Normal and Abnormal Differentiation."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the National Institutes of Health to Dr. Nathan O. Kaplan, Professor of Biochemistry, for research training in "Biochemical and Biophysical Aspects of Growth and Differentiation."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the National Institutes of Health to Dr. Nathan O. Kaplan, Professor of Biochemistry, for Neurochemistry Training.
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the National Public Health Service to Dr. Nathan O. Kaplan, Professor of Biochemistry, for research in the "Development of Methods for Determining Presence of Substances in Body Fluids and Tissues Which May Be Useful in the Early Detection of Cancer."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the United States Public Health Service, Federal Security Agency, to Dr. Harold P. Klein, Professor of Biology, for a project entitled "Synthesis of Lipids in *Saccharomyces Cerevisiae*."

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- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded to Dr. Maurice Sussman, Professor of Biology, for research in "Cellular Differentiation in the Slime Molds."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the United States Public Health Service, National Institutes of Health, to Dr. Edgar Zwilling, Professor of Biology, for research on "Development of Chick Embryo Cells and Tissues."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the United States Public Health Service, National Cancer Institute, to Dr. Edgar Zwilling, Professor of Biology, for a training program in "Developmental Biology."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded to Dr. Herman T. Epstein, Associate Professor of Biophysics, and Dr. Jerome A. Schiff, Associate Professor of Biology, for research in the "Studies of Chloroplast Development in Euglena."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the Mental Health Division to Dr. Richard M. Jones, Associate Professor of Psychology, for research in "A Method for the Study of Ego Synthesis in Dreams."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the National Advisory Health Council to Dr. Julius Marmur, Associate Professor of Biochemistry, for research in "Studies of the Interactions of DHA, RNA, and Proteins."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the National Institute of Mental Health to Dr. Ricardo B. Morant, Associate Professor of Psychology, for research in the "Basic Processes Underlying Figural After-Effects."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the National Institute of Dental Research to Dr. Robert Morris, Associate Professor of The Florence Heller Graduate School, for research in "Factors Affecting Selection of a Clinic Population."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the National Advisory Health Council to Dr. Miriam F. Schurin, Assistant Professor of Biology, for research in "Cytology of Gene Products."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the National Institute of Arthritis and Metabolic Diseases to Dr. Morris Soodak, Assistant Professor of Biology and Biochemistry for research on "The Mechanism and Site of Action of the Anti-Thyroid Drugs."
- NATIONAL INSTITUTES OF HEALTH GRANT (1961) Awarded by the National Institutes of Health to Dr. Helen Van Vunakis, Assistant Professor of Biochemistry, for research on "The Biochemistry of Viruses and Virus-Infected Cells."
- NATIONAL INSTITUTES OF HEALTH GRANT (1960) Awarded by the United States Public Health Service to Dr. Saul G. Cohen, Professor of Chemistry, for research on "Stereospecificity of Enzyme Reactions."

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- NATIONAL INSTITUTES OF HEALTH GRANT (1960) Awarded by the National Institute of Mental Health to Dr. Orrie M. Friedman, Professor of Chemistry, for research on the "Synthesis of Psychochemical Agents."
- NATIONAL INSTITUTES OF HEALTH GRANT (1960) Awarded by the United States Public Health Service to Dr. William P. Jencks, Associate Professor of Biochemistry, for research on "Chemistry and Biochemistry of Energy Transfer."
- NATIONAL INSTITUTES OF HEALTH GRANT (1960) Awarded by the United States Public Health Service, to Dr. Mary Ellen Jones, Associate Professor of Biochemistry, for research on "Carbamyl Enzymes."
- NATIONAL INSTITUTES OF HEALTH GRANT (1960) Awarded by the United States Public Health Service to Dr. Lawrence Levine, Associate Professor of Biochemistry, for research on "Nature of Cytotoxic and Virucidal Activity and Human Complement."
- NATIONAL INSTITUTES OF HEALTH GRANT (1960) Awarded by the National Institute of Arthritis and Metabolic Diseases to Dr. Robert Stevenson, Associate Professor of Chemistry, for research on "Rearrangement in Terpenoid and Steroid Fields."
- NATIONAL INSTITUTES OF HEALTH GRANT (1960) Awarded by the United States Public Health Service, National Institutes of Health, to Dr. Myron Rosenblum, Associate Professor of Chemistry, for research on "Interannular Resonance Effects in Ferrocene and Synthesis of Biologically Active Derivatives."
- NATIONAL INSTITUTES OF HEALTH GRANT (1960) Awarded by the United States Public Health Service to Dr. Lawrence Grossman, Assistant Professor of Biochemistry, for research on "The Metabolism of Cytosine, 5-Methyl Cytosine, Nucleotides and the Corresponding Dihydroneucleotides."
- NATIONAL INSTITUTES OF HEALTH GRANT (1960) Awarded by the National Institute of Arthritis and Metabolic Diseases to Dr. Richard S. Morgan, Assistant Professor of Biochemistry for research in the "Structure of the Microsomal Particle and Related Ribonucleic Acids."
- NATIONAL INSTITUTES OF HEALTH GRANT (1960) Awarded to Dr. Gordon Sato, Assistant Professor of Biochemistry, for support of "Studies on Cellular Differentiation, Using Single Cell Plating Techniques of Mammalian Tissue Culture."
- NATIONAL INSTITUTES OF HEALTH GRANT (1959) Awarded by the National Cancer Institute to Dr. Orrie M. Friedman, Professor of Chemistry, for a project entitled "Chemistry of Diazomethane—Methylated DNA."
- NATIONAL INSTITUTES OF HEALTH GRANT (1958) Awarded by the United States Public Health Service to Dr. Nathan O. Kaplan, Professor of Biochemistry, for research on "Studies on Coenzyme and Nucleic Acid Metabolism."
- NATIONAL SCIENCE FOUNDATION GRANT (1961) Awarded to Dr. Kenneth W. Ford, Professor of Physics, for support of an "Advanced Subject-Matter Institute in Theoretical Physics."

APPENDIX

NATIONAL SCIENCE FOUNDATION GRANT (1961) Awarded to Dr. Louis Levin, Dean of Science, as an "Institutional Grant-In-Aid."

NATIONAL SCIENCE FOUNDATION GRANT (1961) Awarded to Dr. Robert A. Manners, Professor of Anthropology, for research in "The Changing Culture of the Kipsigis Tribe of Kenya."

NATIONAL SCIENCE FOUNDATION GRANT (1961) Awarded to Dr. Max Chretien, Associate Professor of Physics, for the "Establishment of a Computing Center."

NATIONAL SCIENCE FOUNDATION GRANT (1961) Awarded to Dr. Stanley Deser, Associate Professor of Physics, for research in "General Relativity and Elementary Particle Theory."

NATIONAL SCIENCE FOUNDATION GRANT (1961) Awarded to Dr. Paul B. Dorain, Associate Professor of Chemistry, for "Undergraduate Research Participation Program in the Field of Chemistry."

NATIONAL SCIENCE FOUNDATION GRANT (1961) Awarded to Dr. Herman T. Epstein, Associate Professor of Biology, for research in "Properties of a New Megaterium Phage."

NATIONAL SCIENCE FOUNDATION GRANT (1961) Awarded to Dr. Philip A. St. John, Assistant Professor of Biology, for research in "Vitro Studies of Planarian Cells."

NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Saul G. Cohen, Professor of Chemistry, to support his work in the "Chemistry of Free Radicals in Solution."

NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Richard Held, Professor of Psychology, for research on "Development and Maintenance of Visual Motor Coordination in Mammals."

NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Nathan O. Kaplan, Professor of Biochemistry, for "Expansion of Laboratories for Biochemical Research."

NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Nathan O. Kaplan, Professor of Biochemistry, for research on Enzymatic and Immunological Factors Regulating Cellular Activity."

NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Silvan S. Schweber, Professor of Physics, for research on "Theoretical High Energy Physics."

NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Silvan S. Schweber, Professor of Physics, for an Undergraduate Research Participation Program in the Field of Physics.

NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Maurice Sussman, Professor of Biology, for research in "Cellular Differentiation in the Slime Molds."

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- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Maurice Auslander, Dr. David A. Buchsbaum, and Dr. Dock S. Rim of the Department of Mathematics for research in "Homological Algebra."
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Mary Ellen Jones, Associate Professor of Biochemistry, for research in "Biosynthetic and Transfer Reactions."
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Harold I. Levine and Dr. Richard S. Palais of the Department of Mathematics for research in "Differential Topology."
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Julius Marmur, Associate Professor of Biochemistry, for research in "The Biological Polymers."
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Robert Stevenson, Associate Professor of Chemistry, for research in "Constitution and Chemistry of Quassin and Related Products."
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Lawrence Grossman, Assistant Professor of Biochemistry, for research on "Chemistry and Antigenicity of Nucleic Acids."
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. William L. Hoyt, Assistant Professor of Mathematics, for research in "Algebraic Geometry."
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Ray A. Kunze, Assistant Professor of Mathematics, for research in "Harmonic Analysis in Lie Groups."
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. John M. Lowenstein, Assistant Professor of Biochemistry, for research on "Factors Involved in Hydrogen in Biosynthesis."
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Gjerding Olsen, Assistant Professor of Biology, for an Undergraduate Research Participation Program in the field of Biology.
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Morris Soodak, Assistant Professor of Biology and Biochemistry, for an Undergraduate Research Participation Program in the field of Biochemistry.
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Dr. Thomas R. Tuttle, Jr., Assistant Professor of Chemistry, for research in "Application of Magnetic Resonance to Chemical Problems."
- NATIONAL SCIENCE FOUNDATION GRANT (1960) Awarded to Mr. Chandler M. Fulton, Instructor of Biology, for research in "Developmental Analysis of a Colonial Hydroid."
- NATIONAL SCIENCE FOUNDATION GRANT (1959) Awarded to Dr. Albert Kelner, Professor of Biology, for research on the "Spontaneous Mutation in Bacteria."

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- NATIONAL SCIENCE FOUNDATION GRANT (1959) Awarded to Dr. Harold P. Klein, Professor of Biology, for research in "Hydrocarbons and Related Compounds of *Saccharomyces Cerevisiae*."
- NATIONAL SCIENCE FOUNDATION GRANT (1959) Awarded to Dr. Maurice Sussman, Professor of Biology, and Dr. Lawrence Levine, Associate Professor of Biochemistry, for research on "An Immuno Chemical Analysis of Slime Mold Development."
- NATIONAL SCIENCE FOUNDATION GRANT (1959) Awarded to Dr. Edgar Zwill- ing, Professor of Biology, for research on the "Clone Cultures from Early Chick Embryo Cells."
- NATIONAL SCIENCE FOUNDATION GRANT (1959) Awarded to Dr. Edgar H. Brown, Jr., Associate Professor, and Dr. Joseph J. Kohn, Assistant Profes- sor of Mathematics, for research in "Fiber Spaces."
- NATIONAL SCIENCE FOUNDATION GRANT (1959) Awarded to Dr. Max Chrétien, Associate Professor of Physics for "Research in Elementary Particle Physics with the Use of Bubble Chambers."
- NATIONAL SCIENCE FOUNDATION GRANT (1959) Awarded to Dr. Myron Rosen- blum, Associate Professor of Chemistry, for research on "Thermal Decompo- sition of Dihydrooxadiazinones. A New Pyrolysis Reaction."
- NATIONAL SCIENCE FOUNDATION GRANT (1959) Awarded to Dr. Richard S. Morgan, Assistant Professor of Biochemistry, for research in the "Structure of the Micronomal Particle and Related Ribonucleic Acids."
- NATIONAL SCIENCE FOUNDATION GRANT (1958) Awarded to Dr. Harold P. Klein, Professor of Biology, for research on "Formation of Alpha-Amylase by *Pseu- domonas Saccharophila*."
- NATIONAL SCIENCE FOUNDATION GRANT (1958) Awarded to Dr. Oscar Goldman, Dr. Maurice Auslander, and Dr. Arnold Shapiro, Department of Mathematics, for research on "Differentiable and Analytic Manifolds."
- NATIONAL SCIENCE FOUNDATION GRANT (1958) Awarded to Dr. Jerome A. Schiff, Associate Professor of Biology, for research on "Sulfur Metabolism in Plants."
- NATIONAL SCIENCE FOUNDATION GRANT (1958) Awarded to Dr. Morris Soodak, Assistant Professor of Biochemistry, for research on "Biosynthesis of Thyro- globulin."
- NATIONAL SCIENCE FOUNDATION GRANT (1958) Awarded by the National Science Foundation to Dr. Helen Van Vunakis, Assistant Professor of Biochemistry, for research on "The Structure of Functional Groups in Biologically Active Proteins."
- NATIONAL SCIENCE FOUNDATION GRANT (1957) Awarded to Dr. William P. Jencks, Associate Professor of Biochemistry, for research on "Chemistry and Biochem- istry of Energy Transferring Reactions in Biological Systems."

APPENDIX

- MINNIE T. NEWMAN RESEARCH FUND (1961) A legacy established by the Will of Minnie T. Newman of Los Angeles, California, to subsidize research activities in the graduate areas of Chemistry, Bacteriology, and related medical areas.
- OFFICE OF NAVAL RESEARCH GRANT (1961) Awarded by the Department of the Navy, Office of Naval Research, to Dr. David Falkoff, Professor of Physics, for "Theoretical Research in Statistical Mechanics."
- OFFICE OF NAVAL RESEARCH GRANT (1961) Awarded by the Department of the Navy, Office of Naval Research, to Dr. Silvan S. Schweber, Professor of Physics, for research in the "Quantum Field Theory."
- OFFICE OF NAVAL RESEARCH GRANT (1959) Awarded by the Department of the Navy, Office of Naval Research, to Dr. Sidney Golden, Professor of Chemistry, for research in "Topics in Theoretical Chemistry."
- OFFICE OF ORDNANCE RESEARCH, UNITED STATES ARMY GRANT (1961) Awarded by the Department of the Army, Office of Ordnance Research, to Dr. Myron Rosenblum, Associate Professor of Chemistry, for research on "Mechanisms of Electrophilic Substitutions in Fenocene."
- OFFICE OF VOCATIONAL REHABILITATION GRANT (1960) Awarded to Dean Charles I. Schottland, Florence Heller Graduate School for Advanced Studies in Social Welfare, for Social Work Training.
- THE ROCKEFELLER FOUNDATION GRANT (1960) Awarded to Dr. John P. Roche, Morris Hillquit Professor of Labor and Social Thought, to complete "A Study of the Changing Nature of American Liberty."
- DOROTHY H. AND LEWIS ROSENSTIEL FOUNDATION RESEARCH FUND (1956) A grant of \$840,000 whose income and principal, over a period not to exceed ten years, is to be expended for basic research in biochemistry with special reference to glandular disorders. The research is to be conducted in the Rosenstiel Wing of the Science Center, largely financed through a supplementary grant of \$160,000 from the Dorothy H. and Lewis Rosenstiel Foundation of New York City.
- SIDNEY ROSENSTOCK SCIENCE RESEARCH FUND (1960) Established by his friends in honor of Mr. Sidney Rosenstock of Albany, New York, as a continuing fund to be used for science research.
- SAMUEL RUBIN FOUNDATION FUND (1954) Established by the Samuel Rubin Foundation of New York City, through contributions totalling \$260,000, for the purpose of further developing the area of anthropology at the University and of subsidizing a planned program of archaeological research in the history of early man.
- THE RUSSELL SAGE FOUNDATION PROGRAM (1959) Awarded to the School for Advanced Studies in Social Welfare for research in American Philanthropy.
- ALFRED P. SLOAN FOUNDATION GRANT (1961) Awarded to Dr. Maurice Auslander, Professor of Mathematics, for a "Research Fellowship."

APPENDIX

SOCIAL SECURITY ADMINISTRATION GRANT (1961) Awarded to Dr. David G. French, Associate Professor, The Florence Heller Graduate School, for a "Follow-Up Study on Impact of Denial or Termination of Public Assistance on Families."

UNITED STATES AIR FORCE GRANT (1960) Awarded by the United States Air Force, Cambridge Research Center, to Dr. David Falkoff, Professor of Physics, for "Theoretical Studies in Paramagnetic Relaxation."

UNITED STATES AIR FORCE GRANT (1960) Awarded by the United States Air Force, Cambridge Research Center, to Dr. Eugene P. Gross, Professor of Physics, for research in "Theoretical Studies of Interaction of Electromagnetic Waves with Plasmas."

UNITED STATES AIR FORCE GRANT (1960) Awarded by the United States Air Force, Office of Scientific Research, to Dr. Jack S. Goldstein, Associate Professor of Physics, to support research on "Theoretical Investigation of the Plasmas and Degenerate Matters."

UNITED STATES AIR FORCE GRANT (1959) Awarded by the United States Air Force, Office of Scientific Research, to Dr. Eugene P. Gross, Professor of Physics, to support research in "Collision Processes in Gases."

UNITED STATES AIR FORCE GRANT (1959) Awarded by the Air Research and Development Command, Wright Air Development Division to Dr. Paul B. Dorain, Associate Professor of Chemistry, for research in "The Investigations of Exchange Interactions of Mn^{++} in CdS and Related Investigations."

UNITED STATES ATOMIC ENERGY COMMISSION GRANT (1961) Awarded to Dr. Saul G. Cohen, Professor of Chemistry, for research in "A Study of the Effects of Organic Sulfur Compounds of Sulfur in Free Radical and Photochemical Reaction."

UNITED STATES ATOMIC ENERGY COMMISSION GRANT (1961) Awarded by the United States Atomic Energy Commission, Division of Research, to Dr. Henry Linschitz, Professor of Chemistry, for research on "Photochemical Reactions of Complex Molecules."

UNITED STATES ATOMIC ENERGY COMMISSION GRANT (1961) Awarded to Dr. Max Chretien, Associate Professor of Physics, for purchase of "Equipment for Use in an Educational and Training Program."

WALDVOGEL BROTHERS, INC., GRANT (1957) Established through Mr. E. Merrill Seaberg of New York City, for the support of basic research at the University.

ABRAHAM WARSHAW RESEARCH FUND (1951) Established by the late Abraham Warsaw of New York City through the Abraham and Mae Warsaw Foundation, Inc., to provide funds for the science program, with special reference to cancer research. This fund has been further augmented, in his memory, by the family.

WATER RESEARCH FUND (1956) Established by Mr. Henry L. Shuldener of New York City, for the purpose of strengthening the research program of the University, with special emphasis in the field of water chemistry.

APPENDIX

SAMUEL WEINRESS RESEARCH FUND (1956) Established by Mr. Samuel Weinress of Chicago, Illinois, for research in the Life Sciences.

SAUL AND MILDRED WEINRESS RESEARCH FUND (1956) Established by Mr. Saul Weinress of Chicago, Illinois, for research in the Life Sciences.

WALLACE WEINRESS RESEARCH FUND (1956) Established by Mr. Wallace Weinress of Chicago, Illinois, for research in the Life Sciences.

WILLIAM WEINSTEIN GRANT (1958) A grant of \$10,000 from the Estate of William Weinstein of Chicago, Illinois, for teaching and research in the field of biochemistry, with special emphasis on cardiovascular and cancer problems.

APPENDIX XII

Special Grants

JOSEPH B. ABRAMS AND ANNA THURMAN ABRAMS PHILATELIC COLLECTION (1950) A substantial collection of valuable stamp series presented by Mr. Joseph B. Abrams of Brookline, Massachusetts. In later years income from the collection will be used for the needs of the University.

MRS. A. E. BERNSTEIN GRANT (1961) Set up by a generous resident of Los Angeles, California, to be assigned for Cancer Research at the University.

MORRIS BLINDER GRANT (1958) A special grant from Mr. Morris Blinder of Boston, Massachusetts, for the development of a student radio station.

BRANDEIS TRIBUTE FUND (1948) A special fund for the general operating expenses of the University has been established by friends of Brandeis University. This fund may be augmented from time to time in honor of happy occasions or as a memorial to departed dear ones.

CHARNA STONE COWAN MEMORIAL COLLECTION (1955) A fund established by the parents and friends of the late Charna Stone Cowan, the founder of the art rental program at Brandeis, to build a collection of art works which are to be made available in the rooms of Brandeis students to encourage their interest in the fine arts.

CREATIVE ARTS AWARDS (1956) A fund of \$10,000 from friends of the Creative Arts Program supplemented by a University allocation, to be assigned each year as awards for outstanding achievement in the areas of music, theatre, sculpture, painting, and poetry. The awards will be determined by a jury which, each year, will be selected by the University.

LEONARDO DA VINCI RESEARCH FELLOWSHIPS (1959) Established by James Rosenberg of New York and Bern Dibner of Norwalk, Connecticut, to stimulate wider understanding of the impact of Leonardo da Vinci and his era.

ABBA EBAN LECTURESHIP (1959) Established by Mr. and Mrs. Nathan Straus of New York City, as a tribute to the distinguished former Ambassador from Israel to the United States, to underwrite an annual lecture.

ABEL E. FAGEN GRANT (1961) Established by Mr. Abel E. Fagen of Lake Forest, Illinois, to support the more general needs of the Music Department of Brandeis University.

FORD FOUNDATION GRANT (1958) A special grant of \$37,500 to subsidize a teaching experiment at the University in educational television.

MR. AND MRS. MORRIS GASS GRANT (1956) Established in honor of Mr. and Mrs. Morris Gass of Worcester, Massachusetts, to help subsidize the publication of original research by faculty members who are concentrating in the area of the life sciences.

APPENDIX

JACOB A. GOLDFARB BIRTHDAY FUND (1960) Established by the friends and associates of Jacob A. Goldfarb of New York City to honor his 65th birthday. To be used at the discretion of the Board of Trustees for any purposes related to the Goldfarb Library.

HARVARD—BRANDEIS LEGAL CODIFICATION PROJECT (1956) A fund of \$100,000, underwritten by a group of friends who are interested in helping to create a modern logical code of law for the State of Israel, which makes possible a co-operative venture sponsored jointly by the Harvard Law School and Brandeis University.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE GRANT (1959) Awarded by the Office of Education under the National Defense Education Title IV Program for the "Support of the Graduate School—History of Ideas Department."

WILLIAM HELLER STUDENT MENTAL HEALTH PROGRAM (1960) Established through a generous trust fund by Mr. William Heller of New York, to strengthen and expand the University's program in counseling group therapy and student mental health.

HARRY B. HELMSLEY FUND (1956) A grant of \$75,000 allocated by an outstanding Quaker family. Principal and interest are to be disbursed in a period not to exceed ten years for the purpose of bringing to the campus noteworthy personalities from every faith and creed, whose message may help to promote interfaith amity and to break down the barriers that separate races, creeds and colors.

SIDNEY HILLMAN LECTURESHIPS (1954) Established by the Sidney Hillman Foundation, Inc., of New York City, to subsidize lectures in the area of the late Sidney Hillman's interests.

ISAAC AND IDA HORWITZ FUND (1960) Established by Mr. George C. Landsman of Rockville Centre, New York, in memory of his wife's parents, for the purpose of making available resources for the binding and rebinding of books in the University's library.

MRS. GEORGE HYMAN GRANT (1957) A special grant of \$10,000 from Mrs. George Hyman of Washington, D. C., to be used to strengthen international studies at the University in the hope of encouraging a better understanding of international relationships so as to promote the cause of world peace.

FLORINA LASKER FELLOWS IN CIVIL LIBERTIES AND CIVIL RIGHTS (1958) A substantial grant made available to the University by Mrs. Etta Rosensohn and Miss Loula Lasker of New York City from the Estate of Florina Lasker for the purpose of subsidizing gifted people who are devoting themselves to service in the Civil Liberties and Civil Rights field, and for whom a semester of academic stimulation will strengthen their skills and their understanding.

JACK I. AND LILLIAN POSES ARTIST-IN-RESIDENCE PROGRAM (1958) Established by Mr. and Mrs. Jack I. Poses of Westport, Connecticut, with an original grant of \$250,000 to be used to invite distinguished painters and sculptors for residence on the campus. During their stay they may combine work on their own projects with participation in University classes and exhibits.

APPENDIX

ESTHER R. RABB GRANT (1959) Established by Mrs. Ruth G. Paul of New York City, in honor of Mrs. Sidney Rabb of Boston, Massachusetts, to help in the esthetic development of the University landscaping.

ISADOR S. LOW LECTURE (1959) Established as a bequest by the late Isador S. Low of Providence, Rhode Island, so that the income may be used to subsidize an annual lecture whose result may foster further relations between Christians and Jews.

PHILIP W. LOWN INSTITUTE FOR ADVANCED JEWISH STUDIES (1959) Established by Philip W. Lown of Newton, Massachusetts as an endowment whose income is to subsidize scholarly study and research in the areas of Jewish language, literature, history, philosophy, and related fields; to encourage men and women to forward their scholarly research; to subsidize colloquia, institutes and other gatherings of students and scholars. Study and research is to be free from any doctrinal slant in the tradition of objectives.

MASSACHUSETTS COMMITTEE, CATHOLICS, PROTESTANTS & JEWS GRANT (1955) An annual contribution from the Massachusetts Committee, Catholics, Protestants and Jews to help subsidize the work of the Chaplains who represent the Student Christian Association, the Newman Club and the B'nai B'rith Hillel Foundation at Brandeis University.

MASSACHUSETTS SOCIETY PREVENTION OF CRUELTY TO CHILDREN RESEARCH GRANT (1959) Research on a cooperative study on "The Influence of Various Levels of Training on the Performance of the Social Worker in the Field of Child Protection."

RAYTHEON MANUFACTURING COMPANY, INC. GRANT (1959) A grant to help support the Institute in Theoretical Physics in the 1959 Summer School.

MR. AND MRS. CHARLES REVSON GRANT (1957) A special grant from Mr. and Mrs. Charles Revson of New York City, to subsidize the women's athletic program at the University, and to stimulate wholesome intercollegiate rivalry in women's athletics among the colleges of New England.

JAMES N. ROSENBERG GRANT (1958) A special grant from Mr. James N. Rosenberg of New York City, to be used for research in art history.

SYLVIA AND SAMUEL SCHULMAN INSTITUTE IN COMMUNICATIONS ARTS (1959) A grant established by Samuel Schulman of New York to subsidize teaching and research in the Communications Arts. Provision will be made for special projects that relate to television, radio, motion pictures, and other mass media, through formal teaching and research channels and through special seminars and colloquia.

BEN G. AND BELLE SHAPIRO THREE CHAPELS SERVICE ENDOWMENT (1960) Established in honor of Ben G. Shapiro by his devoted friends. To be used for encouraging and supporting activities of the three student religious organizations: the B'nai B'rith Hillel Foundation, the Newman Club and the Student Christian Association, particularly with reference to objectives designed to promote interfaith amity.

APPENDIX

NATHAN STRAUS GRANT (1958) A special allocation of \$10,000 to explore the potentialities of a program of communication arts, established by Mr. Nathan Straus, President of WMCA, New York City.

THEATER ARTS FELLOWSHIPS (1959) Six fellowships set up for full tuition aid for promising students in the Theater Arts Institute of the 1959 Summer School, contributed by Mr. Eddie Cantor, Mr. Danny Kaye, Mr. Elia Kazan, Mr. David Niven, Mr. Dore Schary, and the Theatre Guild through Mr. Lawrence Langner.

ADOLPH ULLMAN MEMORIAL LECTURES (1960) Established by devoted friends of the late Boston philanthropist, former member of the Brandeis Board of Trustees, to pay tribute to a gifted patron of the Creative Arts.

UNITED STATES STEEL FOUNDATION GRANT (1957) A special un earmarked grant to assist the University in the fulfillment of its general needs.

MARTIN WEINER ENDOWMENT FUND FOR DISTINGUISHED LECTURERS AND VISITORS (1960) Established by Mr. Martin Weiner of Clifton, New Jersey, so that the income may be used to bring outstanding personalities to the campus for such major University occasions as Commencement, special Convocations, and as special and extracurricular resource people.

THE IRVING LOUIS WEINMAN MEMORIAL TRUST FUND IN THE AREA OF MUSIC (1960) Established by his parents, Mr. and Mrs. Moses Weinman of Newton, Massachusetts. The fund to be used by the Music Department for the support of creative activity by gifted students.

WOODROW WILSON NATIONAL FELLOWSHIP FOUNDATION GRANT (1959) Awarded to the Graduate School to be used "For Assisting beyond their First Year Graduate Work, Students Genuinely Interested in a Teaching Career and for the Strengthening of the University's Graduate School."

STEPHEN S. WISE MEMORIAL LECTURE (1957) An endowment established by Mr. Nathan Straus of New York City, whose income is to be used to underwrite an annual lecture in the areas of interest of the late Rabbi Stephen S. Wise.

APPENDIX XIII

Family Funds

DR. J. J. AND DAISY ABRAMS FAMILY FUND (1960) Established by Dr. and Mrs. J. J. Abrams of Chestnut Hill, Massachusetts, to be used as general funds by the University in its expanding programs.

HAROLD AND EVELYN ANSIN FAMILY FUND (1961) Established by Mr. and Mrs. Harold Ansin of Chestnut Hill, Massachusetts, to be used as general funds by the University in its expanding programs.

DAVID A. AND ELEANOR B. ARANSKY FAMILY FUND (1960) Established by Mr. and Mrs. David Aransky of Newton, Massachusetts, to be used as general funds by the University in its expanding programs.

ARNOLD AND ETHEL ARON FAMILY FUND (1960) Established by Mr. and Mrs. Arnold Aron of Chestnut Hill, Massachusetts, to be used as general funds by the University in its expanding programs.

HENRY AND EVELYN B. AUGUST FAMILY FUND (1959) Established by Mr. and Mrs. Henry August of Brookline, Mass. in honor of the marriage of their daughter, Susan. This is to be used as general funds by the University in its expanding programs.

SEYMOUR AND BARBARA BERMAN FAMILY FUND (1960) Established by Mr. and Mrs. Seymour Berman of West Newton, Massachusetts, to be used as general funds by the University in its expanding programs.

DAVID S. AND MARIAN BOND FAMILY FUND (1959) Established by Mr. and Mrs. David S. Bond of West Newton, Massachusetts, to be used as general funds by the University in its expanding programs.

FRANK AND SONYA BREZNIAK FAMILY FUND (1960) Established by Mr. and Mrs. Frank Brezniak of Newton Centre, Massachusetts, to be used as general funds by the University in its expanding programs.

JOSEPH WILLIAM AND SARAH BURG FAMILY FUND (1959) Established by Mr. and Mrs. Joseph William Burg of Brookline, Massachusetts, to be used as general funds by the University in its expanding programs.

JOSEPH AND ERNESTINE BURACK FAMILY ENDOWMENT FUND (1960) Established by Mr. and Mrs. Joseph Burack of Brookline, Massachusetts, as an endowment fund to be used by the University as general funds in its expanding programs.

NORMAN L. AND HELENE R. CAHNERS FAMILY FUND (1959) Established by Mr. and Mrs. Norman Cahnners of Waban, Massachusetts, to be used by the University as general funds in its expanding programs.

SAMUEL AND IDA COFFMAN FAMILY FUND (1961) Established by Mr. and Mrs. Samuel Coffman of Quincy, Massachusetts, to be used as general funds by the University in its expanding programs.

APPENDIX

- LOUIS D. COVICH FAMILY FUND (1959) Established by Mrs. Louis Covich of Brookline, Massachusetts, Mr. and Mrs. Sidney Covich of Waban, Massachusetts, and Mr. and Mrs. Henry Roberts of Brookline, Massachusetts, in memory of Mr. Louis D. Covich, to be used as general funds by the University in its expanding programs.
- RUBIN AND ETHEL EPSTEIN FAMILY FUND (1959) Established by Mr. and Mrs. Rubin Epstein of Chestnut Hill, Massachusetts, to be used as general funds by the University in its expanding programs.
- THEODORE AND FAYE FEINSTEIN FAMILY FUND (1959) Established by Mr. and Mrs. Theodore Feinstein of Brookline, Massachusetts, to be used as general funds by the University in its expanding programs.
- DAVID W. AND KATE GOREN FAMILY FUND (1959) Established by Mr. and Mrs. David W. Goren of Brookline, Massachusetts, to be used as general funds by the University in its expanding programs.
- COLONEL BERNARD L. AND FRED A. GORFINKLE FAMILY FUND (1959) Established by Colonel Bernard L. and Mrs. Gorfinkle of Brookline, Massachusetts, to be used as general funds by the University in its expanding programs.
- JACOB AND FRANCES GROMAN FAMILY FUND (1960) Established by Mr. and Mrs. Jacob Groman of Winthrop, Massachusetts, to be used as general funds by the University in its expanding programs.
- MOREY AND HELEN HIRSCH FAMILY FUND (1959) Established by Mr. and Mrs. Morey Hirsch of Brookline, Massachusetts, to be used as general funds by the University in its expanding programs.
- MAX R. AND MARIE KARGMAN FAMILY FUND (1960) Established by Mr. and Mrs. Max Kargman of Belmont, Massachusetts, to be used as general funds by the University in its expanding programs.
- EDWARD AND IRENE KAVINOKY FAMILY FUND (1960) Established by Mr. and Mrs. Edward Kavinoky of Buffalo, New York, to be used as general funds by the University in its expanding programs.
- MAX N. AND CELIA LAMPERT FAMILY FUND (1959) Established by Mr. and Mrs. Max N. Lampert of Newton, Massachusetts, to be used as general funds by the University in its expanding programs.
- BERNARD L. AND FANNY LANDERS FAMILY FUND (1959) Established by Mr. and Mrs. Bernard L. Landers of Newton Centre, Massachusetts, to be used as general funds by the University in its expanding programs.
- SAUL AND EDITH LEIBOW FAMILY FUND (1961) Established by Mr. and Mrs. Saul Leibow of Sharon, Massachusetts, to be used as general funds by the University in its expanding programs.
- IRVING AND IDA G. LEVITT FAMILY FUND (1960) Established by Mr. and Mrs. Irving Levitt of Chestnut Hill, Massachusetts, to be used as general funds by the University in its expanding programs.

APPENDIX

- JACOB AND ESTHER E. MARGOLIS FAMILY FUND (1960) Established by Mr. and Mrs. Jacob Margolis of Chestnut Hill, Massachusetts, to be used as general funds by the University in its expanding programs.
- LEO AND MILDRED MICHELSON FAMILY FUND (1961) Established by Mr. and Mrs. Leo Michelson of Brookline, Massachusetts, to be used as general funds by the University in its expanding programs.
- BENJAMIN AND FLORENCE NIGROSH FAMILY FUND (1959) Established by Mr. and Mrs. Benjamin Nigrosh of Brookline, Massachusetts, to be used as general funds by the University in its expanding programs.
- SAMUEL M. AND JESSIE PINSLY FAMILY FUND (1959) Established by Mr. and Mrs. Samuel Pinsly of Boston, Massachusetts, to be used as general funds by the University in its expanding programs.
- SAMUEL W. AND BEATRICE POORVU FAMILY FUND (1959) Established by Mr. and Mrs. Samuel W. Poorvu of Newton Centre, Massachusetts, to be used as general funds by the University in its expanding programs.
- DAVID AND ETHEL PRESSON FAMILY FUND (1959) Established by Mr. and Mrs. David Presson of Newton Centre, Massachusetts, to be used as general funds by the University in its expanding programs.
- HERMAN L. AND SADIE RIFKIN FAMILY FUND (1959) Established by Mr. and Mrs. Herman Rifkin of Boston, Massachusetts, to be used as general funds by the University in its expanding programs.
- HAROLD AND BEATRICE RUDNICK FAMILY FUND (1961) Established by Mr. and Mrs. Harold Rudnick of Chestnut Hill, Massachusetts, to be used as general funds by the University in its expanding programs.
- ALFRED I. AND HAZEL SHARENOW FAMILY FUND (1959) Established by Mr. and Mrs. Alfred I. Sharenow of Stratham, New Hampshire, to be used as general funds by the University in its expanding programs.
- HARRY AND IDA SHER FAMILY FUND (1959) Established by Mr. and Mrs. Harry Sher of Newton, Massachusetts, to be used as general funds by the University in its expanding programs.
- MAX AND EVA STERMAN FAMILY ENDOWMENT FUND (1960) Established by Mr. and Mrs. Max Sterman of Brookline, Massachusetts, as an endowment fund, to be used as general funds by the University in its expanding programs.
- SWERLING FAMILY FUND (1960) Established by Bertram L. and Phyllis Swerling and Daniel S. and Adacie Swerling, of Newton, Massachusetts, to be used as general funds by the University in its expanding programs.
- HAROLD AND EDITH WIDETT FAMILY FUND (1959) Established by Mr. and Mrs. Harold Widett of Brookline, Massachusetts, to be used as general funds by the University in its expanding programs.
- JOSEPH AND MADELINE WISE FAMILY FUND (1959) Established by Mr. and Mrs. Joseph Wise of Newton Centre, Massachusetts, to be used as general funds by the University in its expanding programs.

APPENDIX

ROBERT AND ETHEL WISE FAMILY FUND (1959) Established by Mr. and Mrs. Robert Wise of Brookline, Massachusetts, to be used as general funds by the University in its expanding programs.

ZIMBLE FAMILY FUND (1959) Established by Mr. and Mrs. Carl S. Zimble of West Newton, Massachusetts, Mr. and Mrs. Mitchell L. Zimble of Newtonville, Massachusetts, and Mr. and Mrs. Herbert L. Adler of West Newton, Massachusetts in honor of Mr. Louis Zimble. It is to be used as general funds by the University in its expanding programs.

APPENDIX XIV

NATIONAL WOMEN'S COMMITTEE

Library Endowment Funds

MICHAEL ADDISON LIBRARY ENDOWMENT FUND Established in memory of her beloved husband, Michael Addison, by Mrs. Michael Addison of New York City.

DEBORAH DEITZ LIBRARY ENDOWMENT FUND Established in memory of Deborah Deitz by the Westchester Shore Chapter of Brandeis University National Women's Committee.

DEBORAH DEITZ LIBRARY ENDOWMENT FUND Established in memory of Deborah Deitz by the Central Westchester Chapter of Brandeis University National Women's Committee.

ROMAYNE M. GOLDBERG LIBRARY ENDOWMENT FUND Established by Mrs. Harold Sherman Goldberg of Newton, Massachusetts.

BECKY AND MORRIS GOLDE LIBRARY ENDOWMENT FUND Established in memory of her beloved parents, Becky and Morris Golde by Mrs. Michael Addison of New York City.

JACOB GOLDFARB LIBRARY ENDOWMENT FUND Established in honor of Jacob Goldfarb of New York City by Brandeis University National Women's Committee.

ROSALIND W. LEVINE LIBRARY ENDOWMENT FUND Established in honor of Mrs. Samuel A. Levine of Newton, Massachusetts, by Harry L. Rogal of Boston, Massachusetts.

BELLA AND DAVID SHAPIRO LIBRARY ENDOWMENT FUND Established in memory of Bella and David Shapiro by Mr. and Mrs. Irving H. Shapiro of New York City.

DORA SIEGEL LIBRARY ENDOWMENT FUND Established in memory of his wife, Dora Siegel by Henry J. Siegel of Beverly Hills, California.

HENRY J. SIEGEL LIBRARY ENDOWMENT FUND Established by Henry J. Siegel of Beverly Hills, California.

ABRAHAM SOLOMON LIBRARY ENDOWMENT FUND Established in memory of her husband, Abraham Solomon by Mrs. Abraham Solomon of New York City.

BROOKLYN CHAPTER LIBRARY ENDOWMENT FUND Established by the Brooklyn Chapter of Brandeis University National Women's Committee.

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